Fig.77A

LIQUID CRYSTAL 　　　　AUXILIARY CAPACITOR

Fig.77B

Fig.78A

Fig.78B

Fig.79A
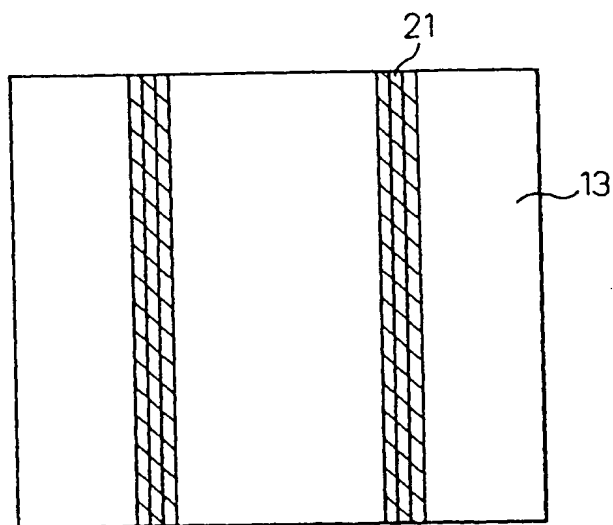
Fig.79B
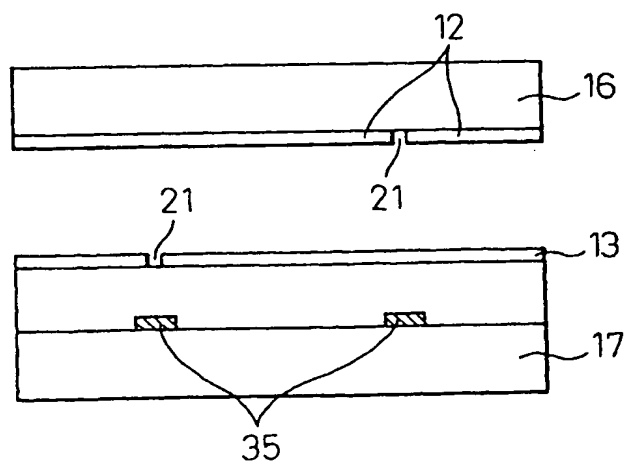
Fig.80A
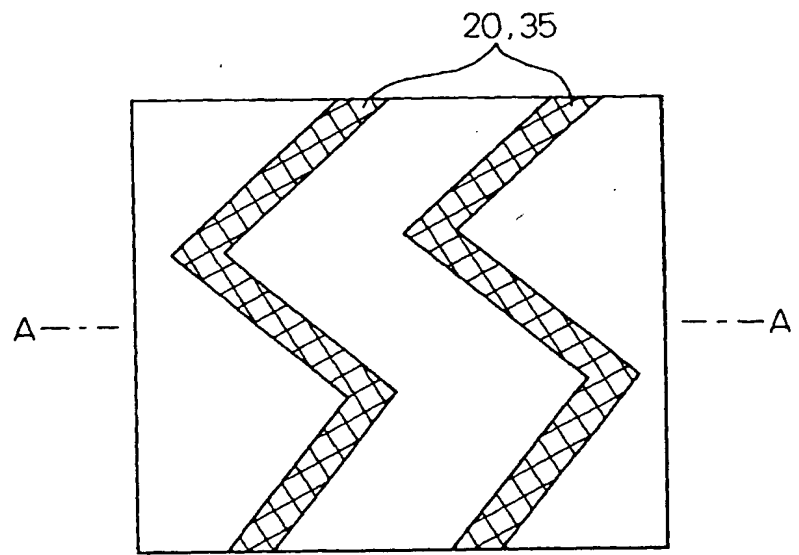
Fig.80B

Fig.81A

Fig.81B

F i g.82

20A

14

20B

Fig.83A

12

14

13

Fig.83B

12

14

13

Fig.83C

12

14

13

Fig.83D

12

14

13

Fig.84

Fig.85A

DARK=BLACK(1/64)
LIGHT=EACH
    GRAY-SCALE
    LEVEL

DARK → LIGHT

LIGHT → DARK

RESPONSE TIME (ms)

GRAY-SCALE (1/64)

Fig.85B

DARK=BLACK(1/64)
LIGHT=EACH
    GRAY-SCALE
    LEVEL

DARK → LIGHT

LIGHT → DARK

RESPONSE TIME (ms)

GRAY-SCALE (1/64)

Fig.85C

RESPONSE TIME (ms)

DARK=BLACK(1/64)
LIGHT=EACH
GRAY-SCALE
LEVEL

DARK → LIGHT

LIGHT → DARK

GRAY-SCALE (1/64)

Fig.85D

RESPONSE TIME (ms)

130.97ms

DARK=BLACK(1/64)
LIGHT=EACH
GRAY-SCALE
LEVEL

DARK → LIGHT

LIGHT → DARK

GRAY-SCALE (1/64)

Fig.86A

20B

20A

14

Fig.86B

14   20B   20A

Fig.87

Fig.88

20A

20B

20D   20D

Fig.89

Fig.90A

Fig.90B

F i g.91

20B   20A
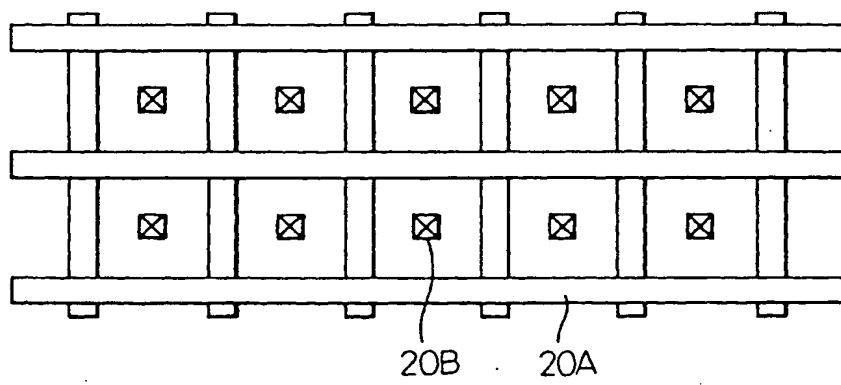
Fig.92A

Fig.92B

Fig.93

Fig.88

20A

20B

20D   20D

Fig.94

Fig.95

Fig.96

21A 63 23A
~16
~12
~13
~17

23B 63 21B

Fig.97

~16
~12
~13
~17

23B 63 21B

Fig.98

20A 21A
~16
~12
13
~17

23B 63
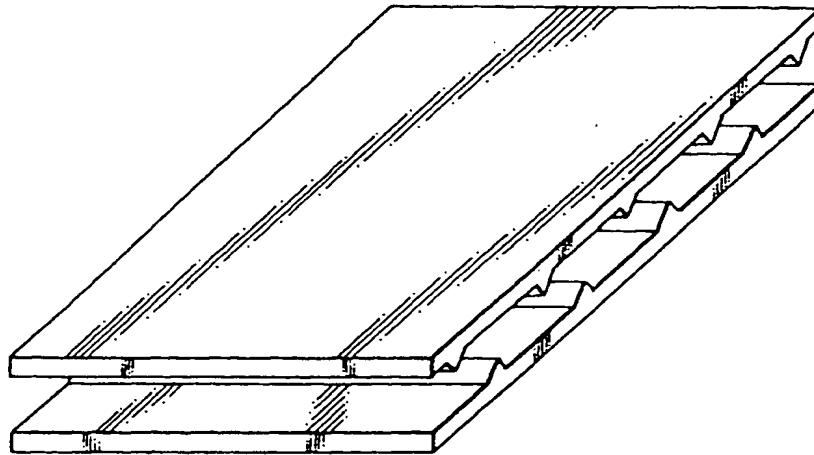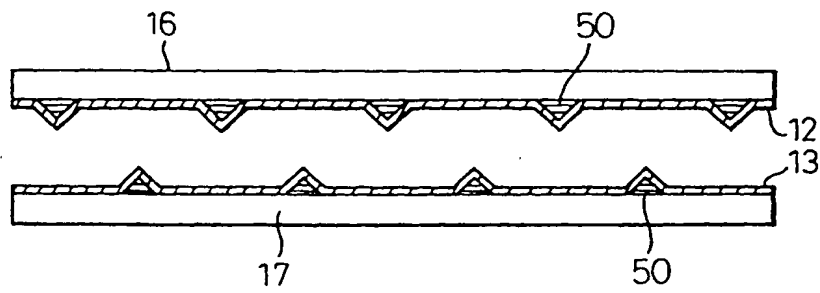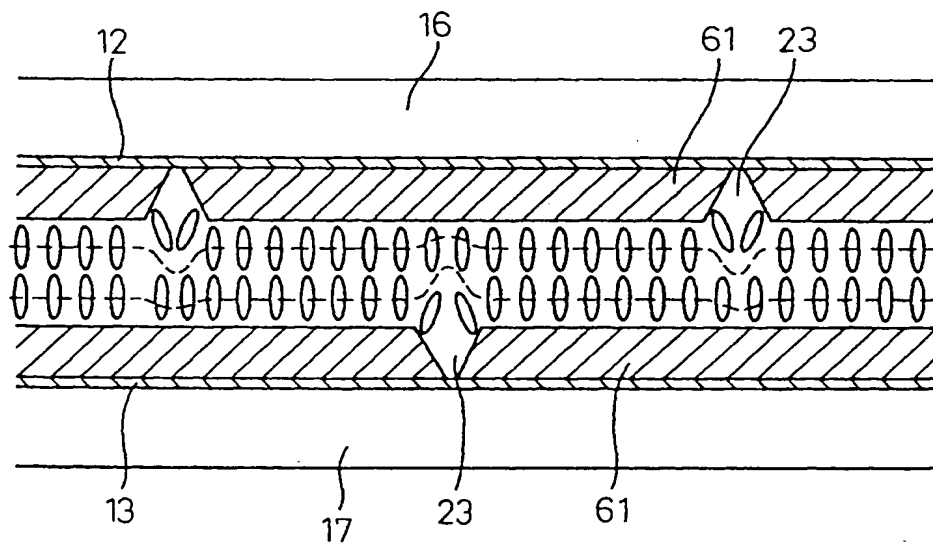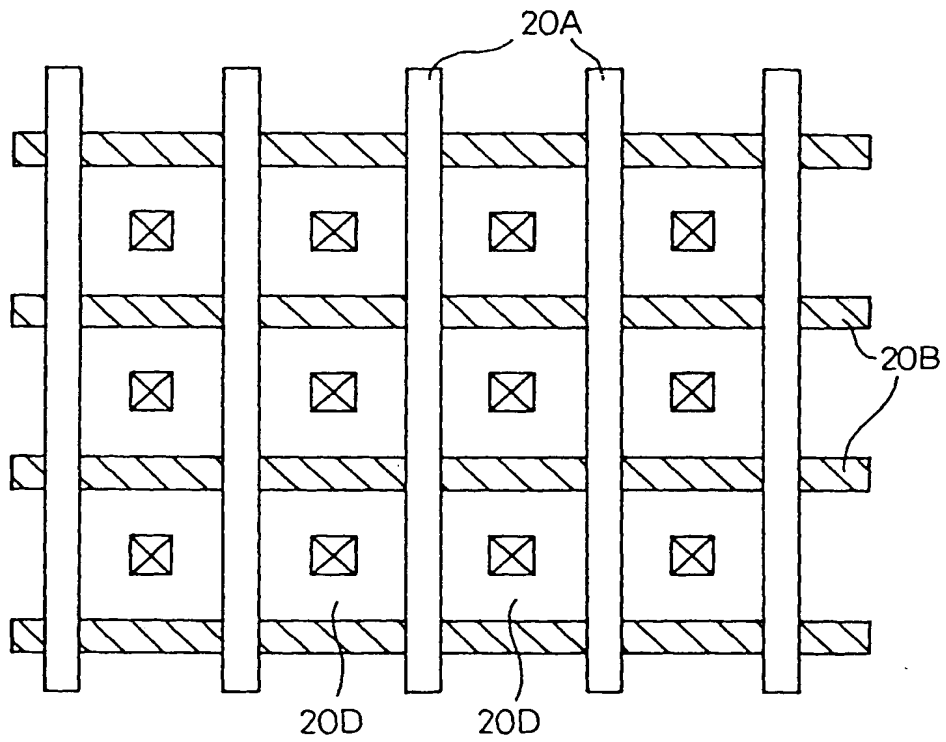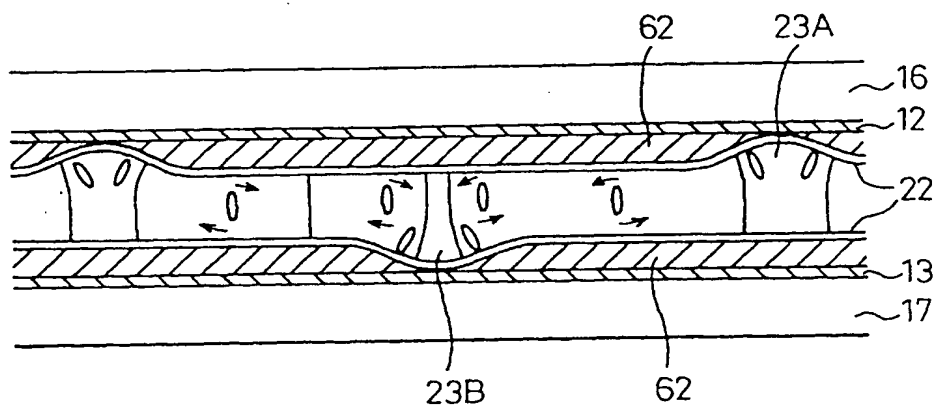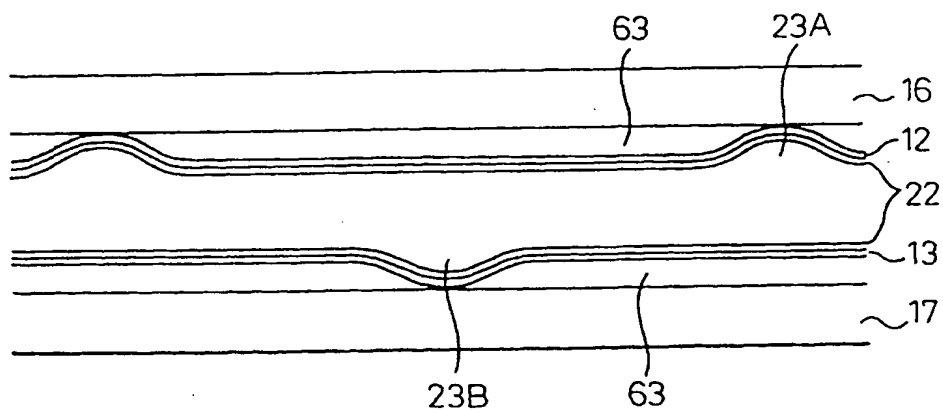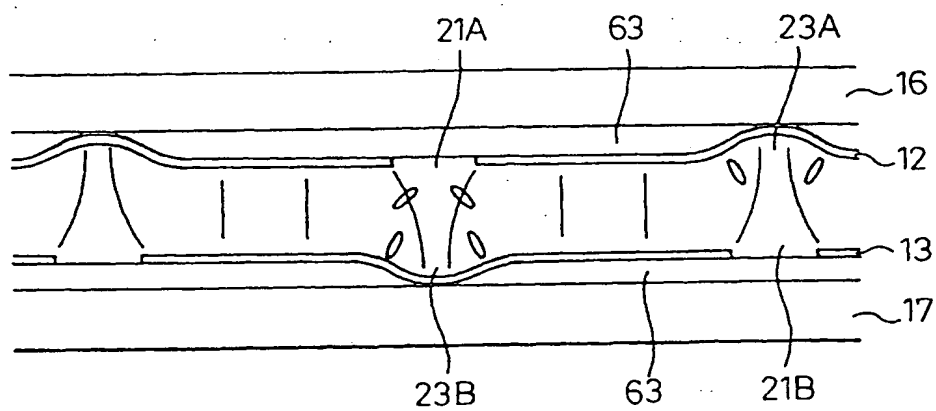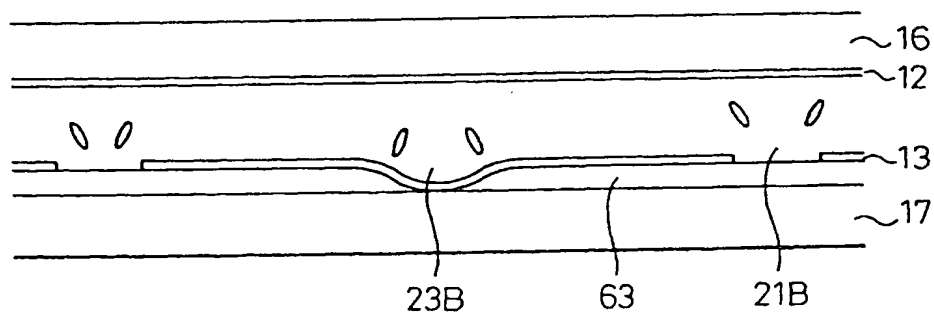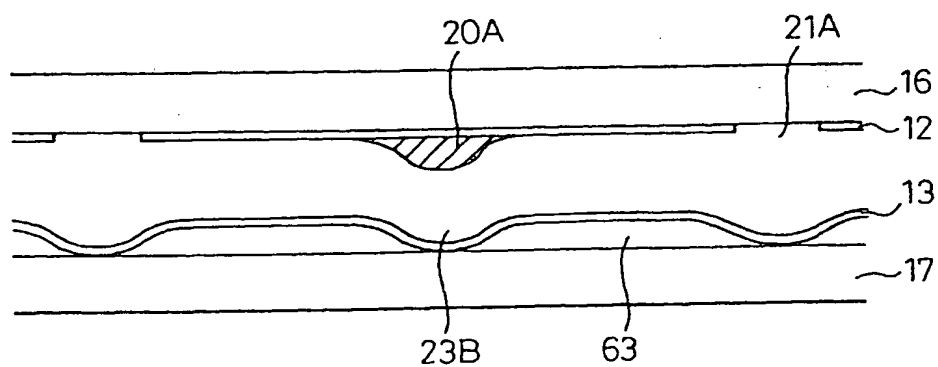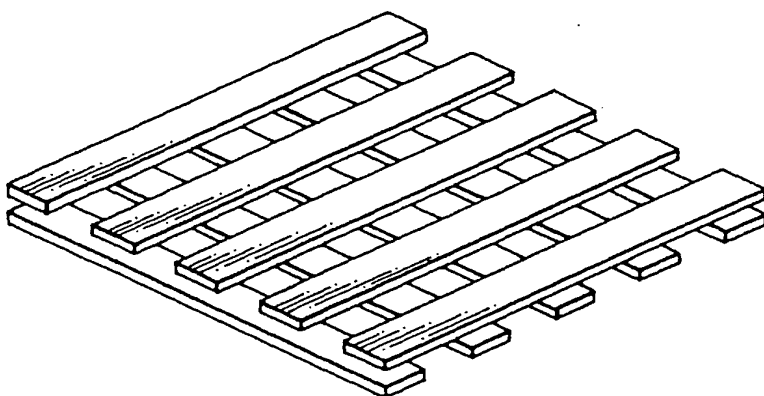
Fig.99A

Fig.99B
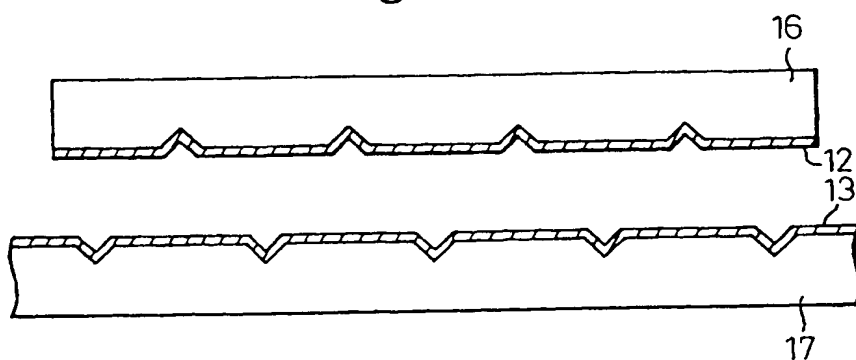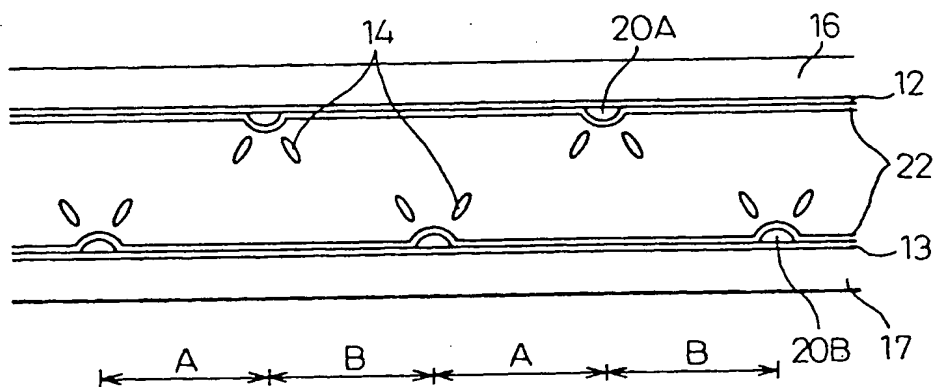
Fig.100A

Fig.100B

Fig.101A

Fig.101B

$$A' + A'' = 2A$$
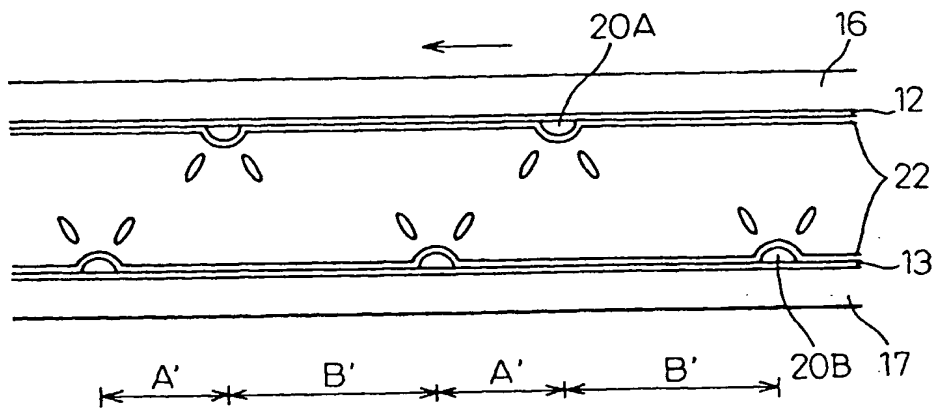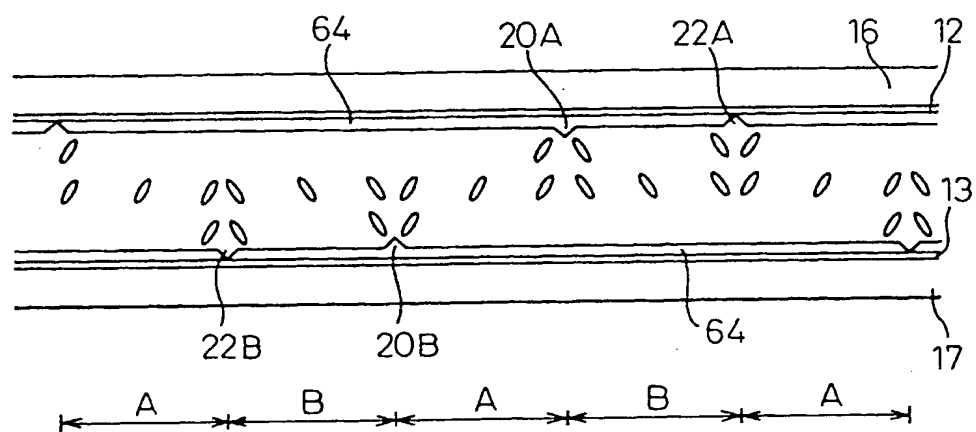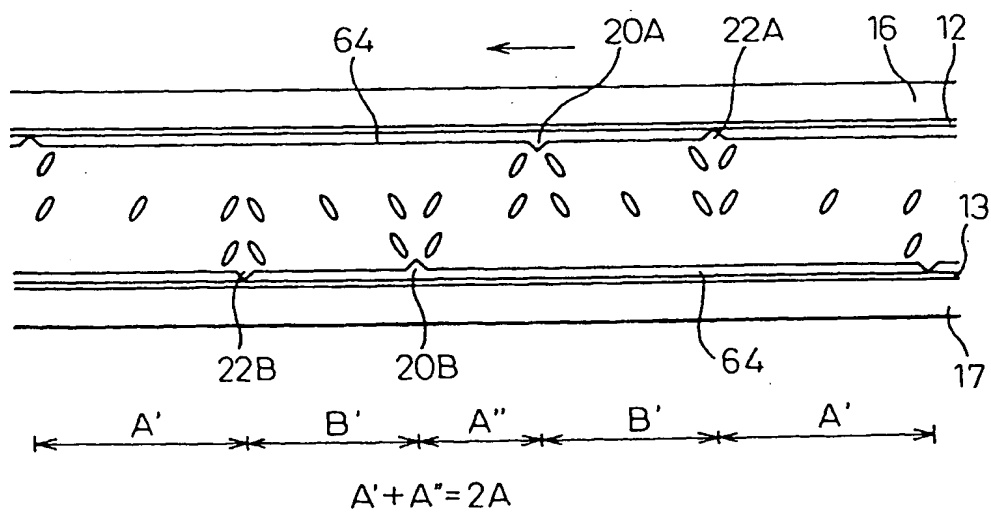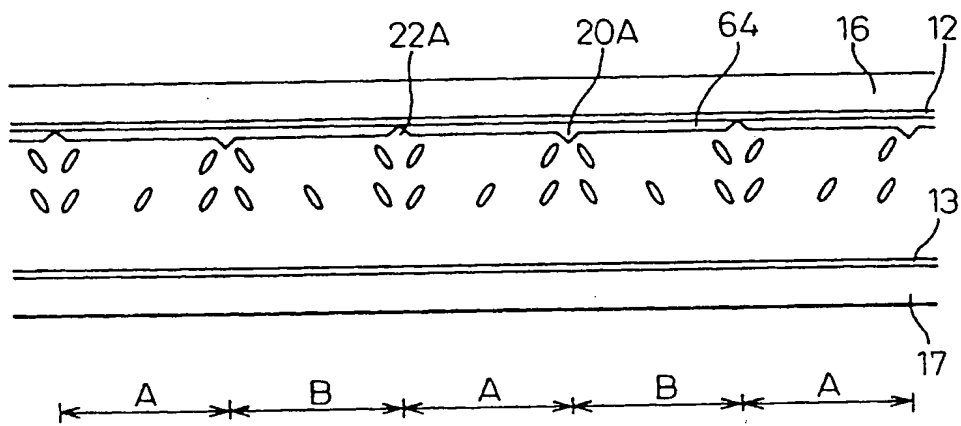
Fig.102

Fig.103A

Fig.103B

Fig.104

20A

20B
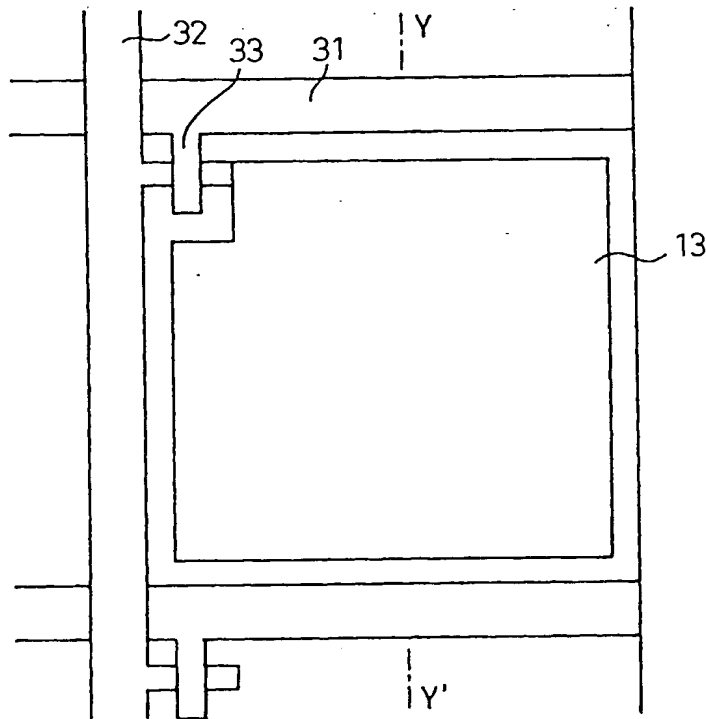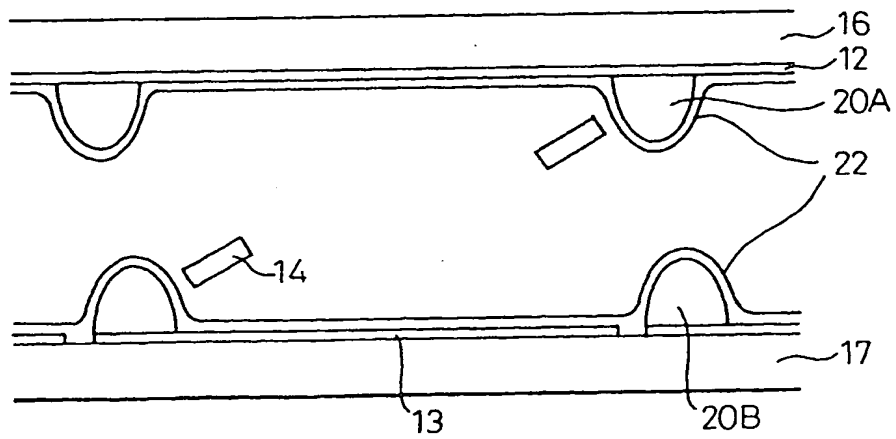
14
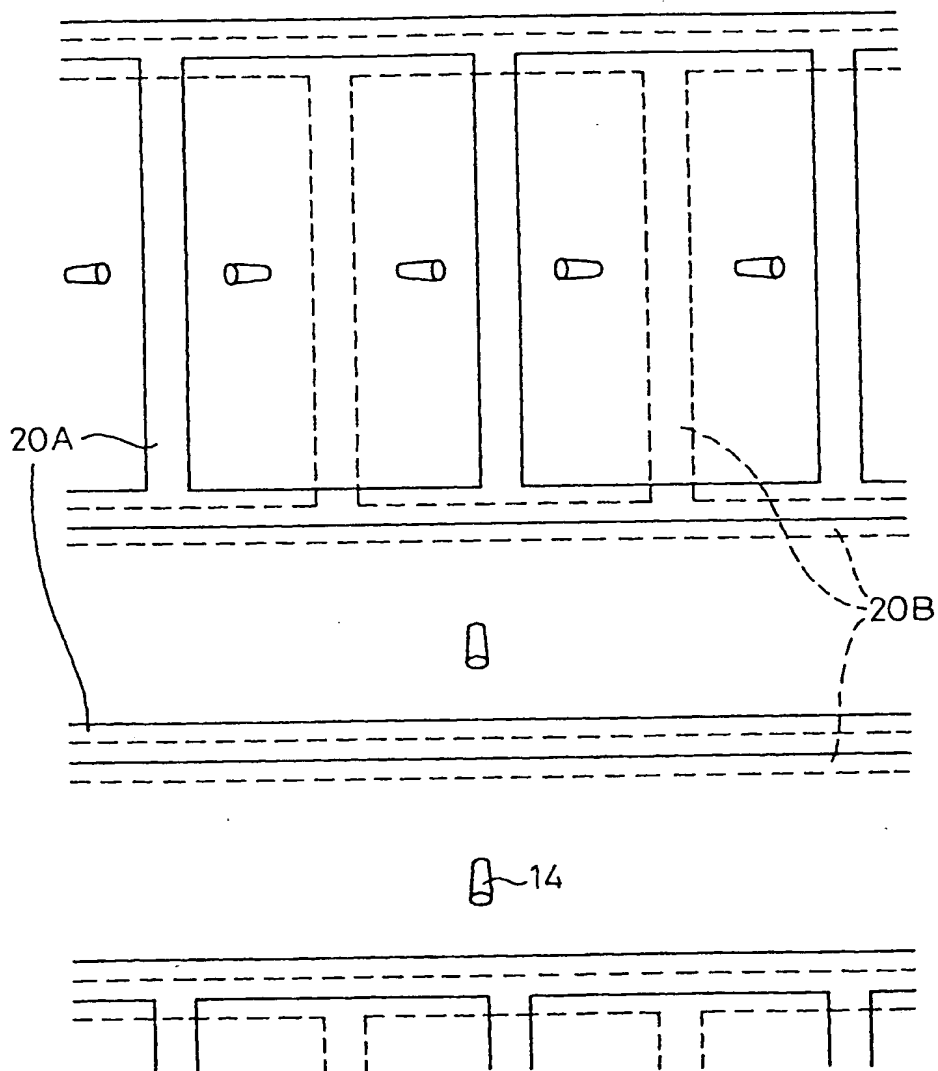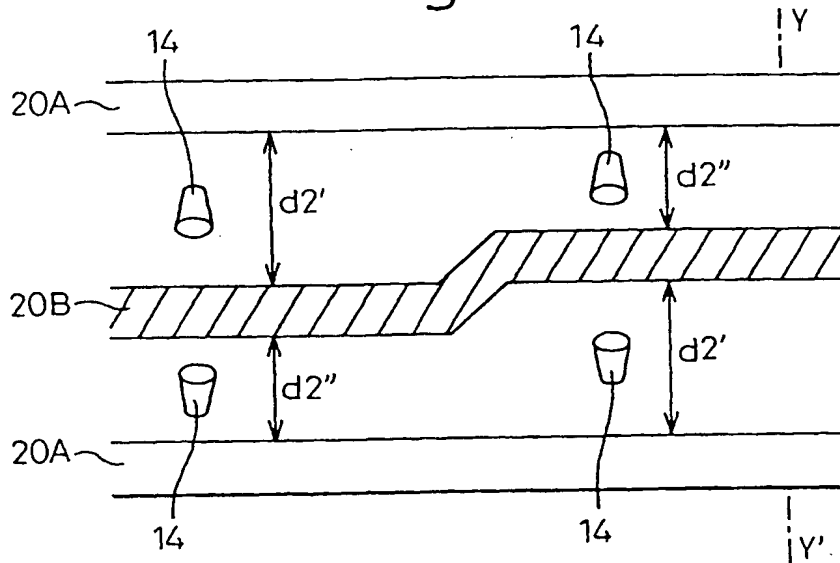
Fig.105A

Fig.105B
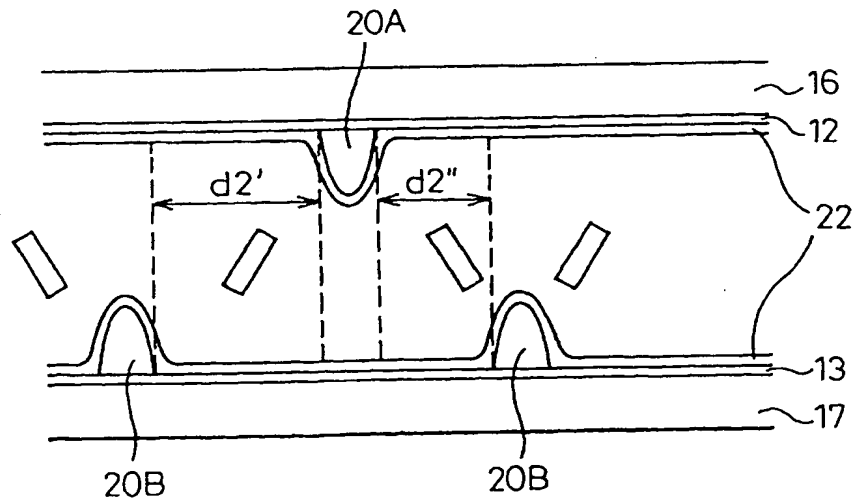
Fig.106
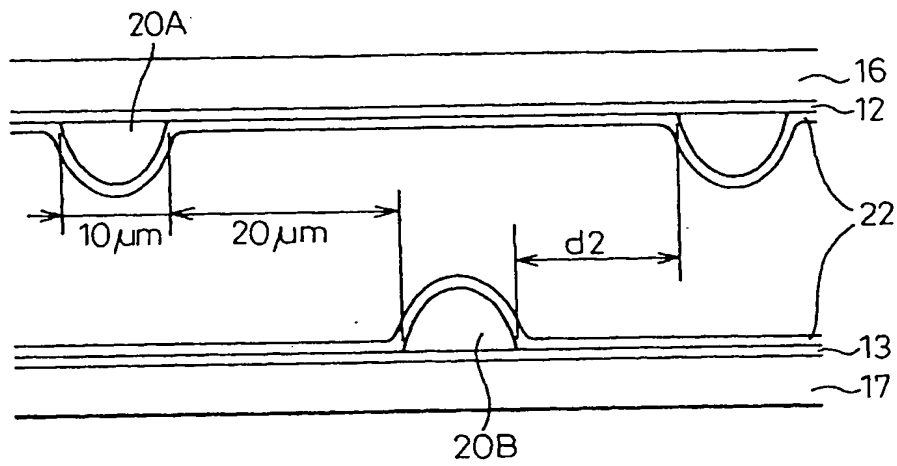
Fig.107
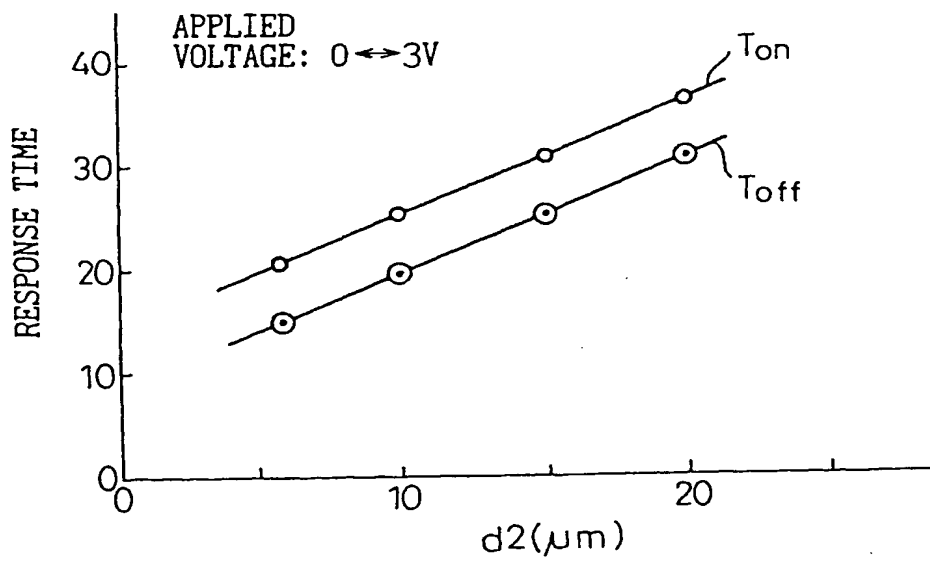
Fig.108A
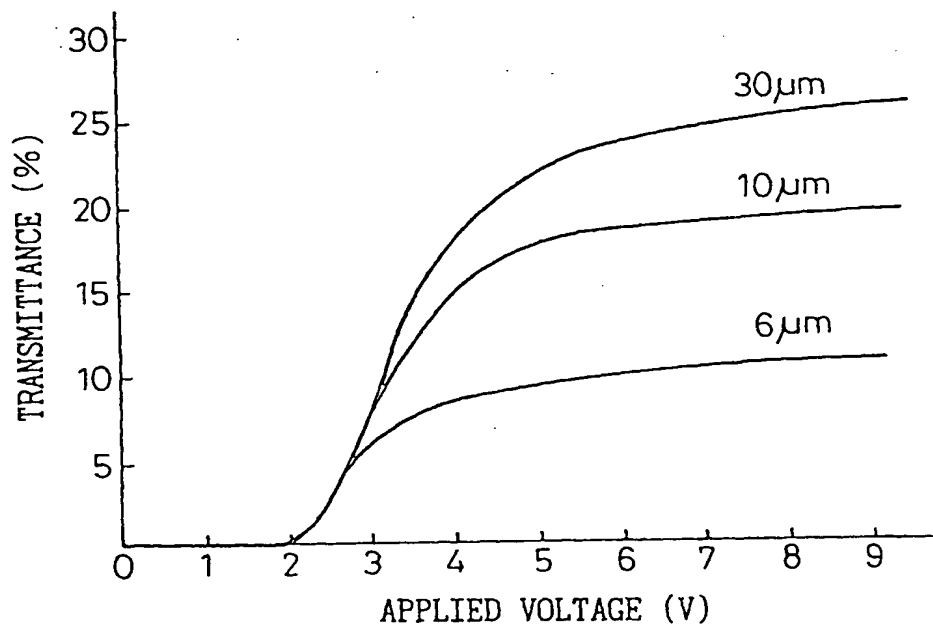
Fig.108B
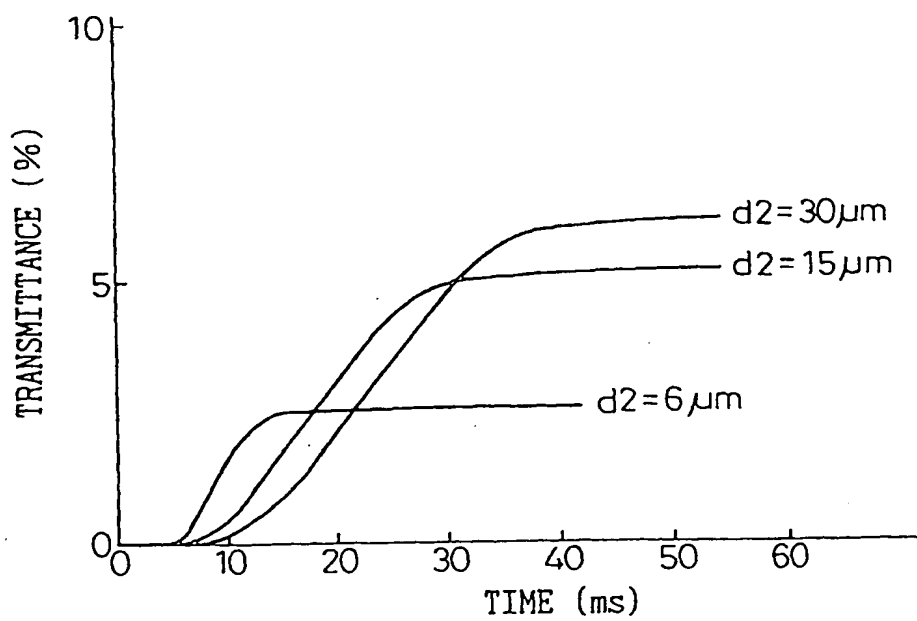
Fig.109A

Fig.109B

Fig.110

20A   20A

20B

14
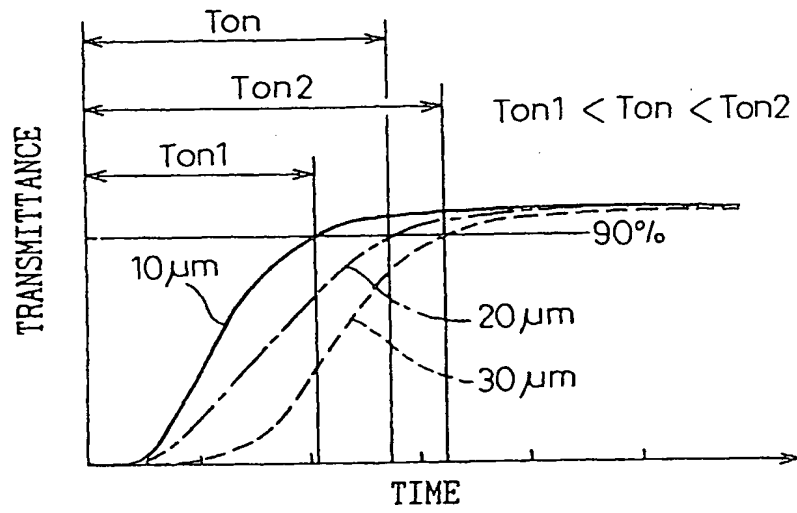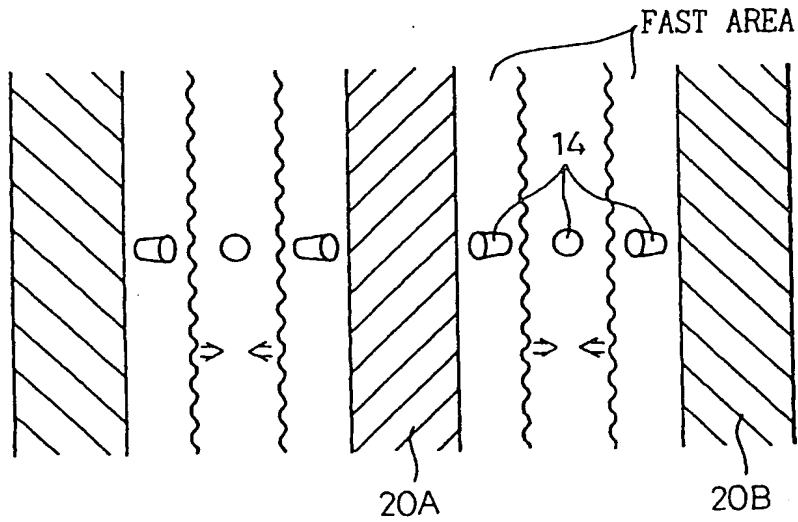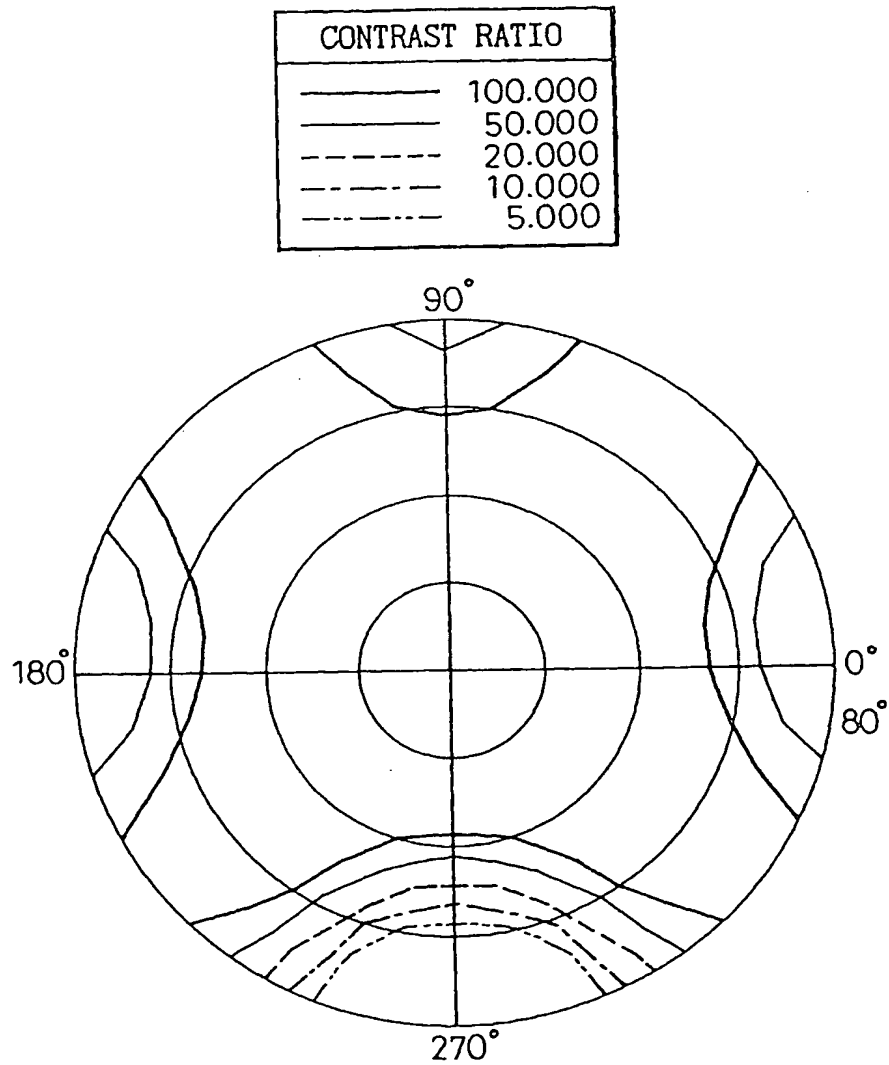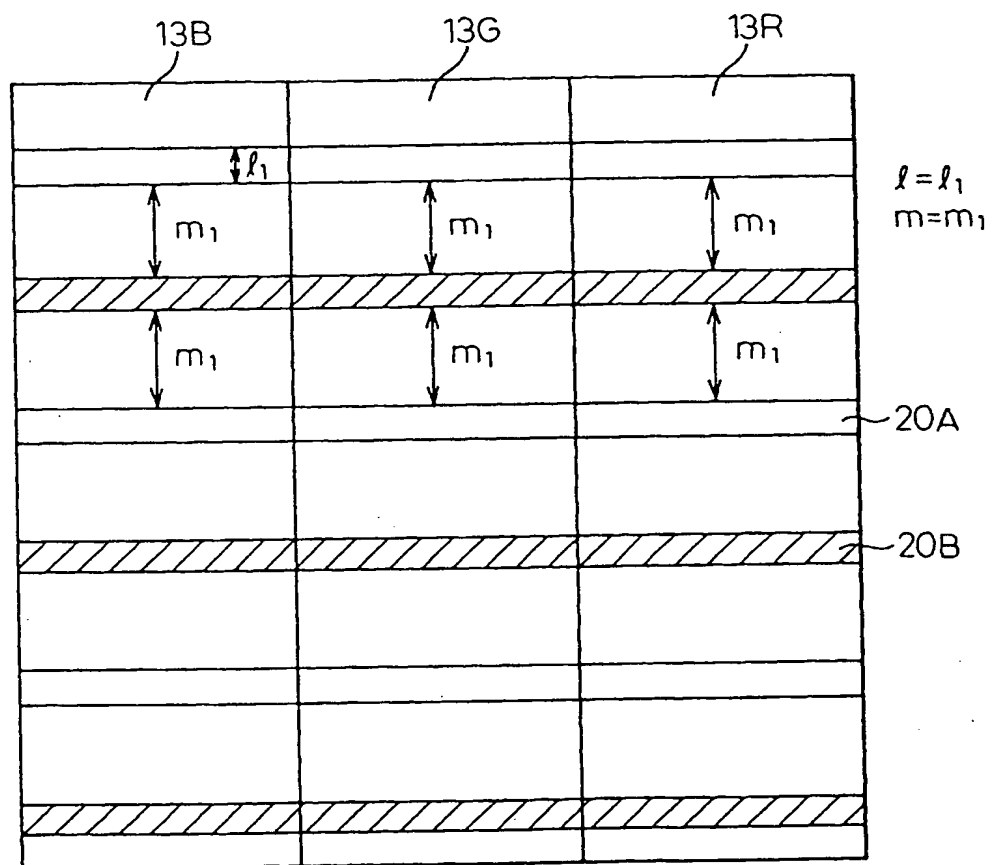
Fig.111

Fig.112

Fig.113
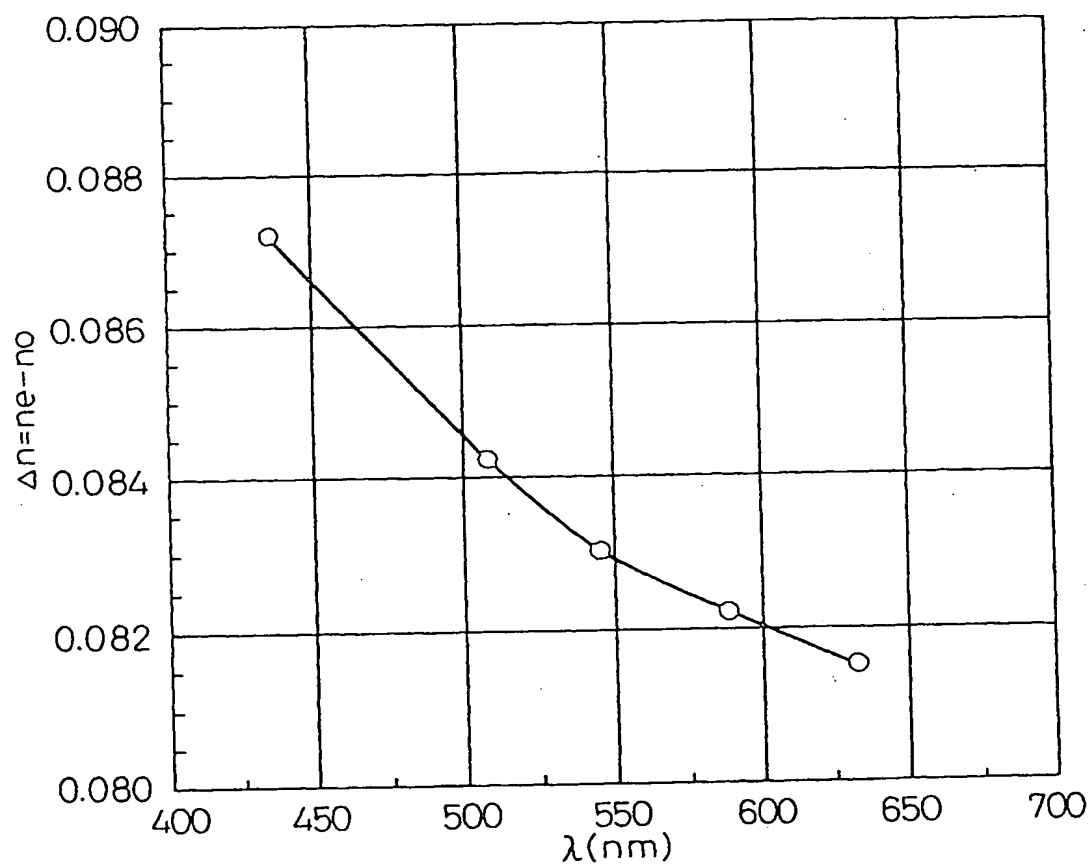
Fig.114
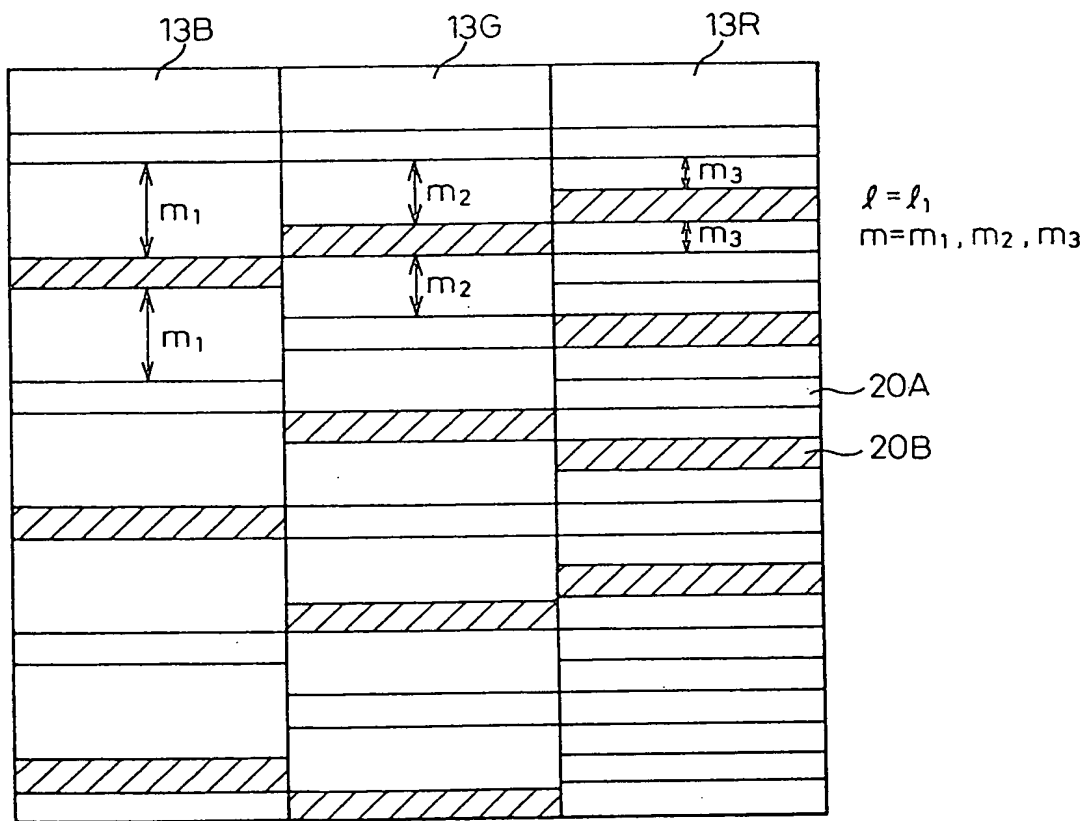
Fig.115

Fig.116

Fig.117

$$\ell = \ell_1$$
$$m = m_1, m_2$$
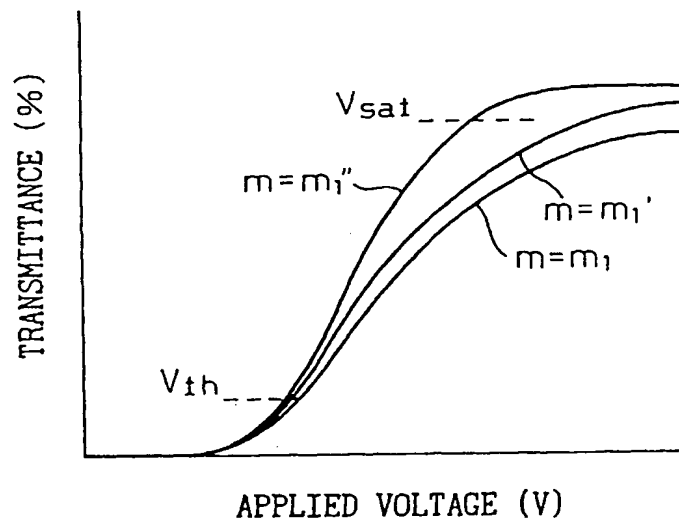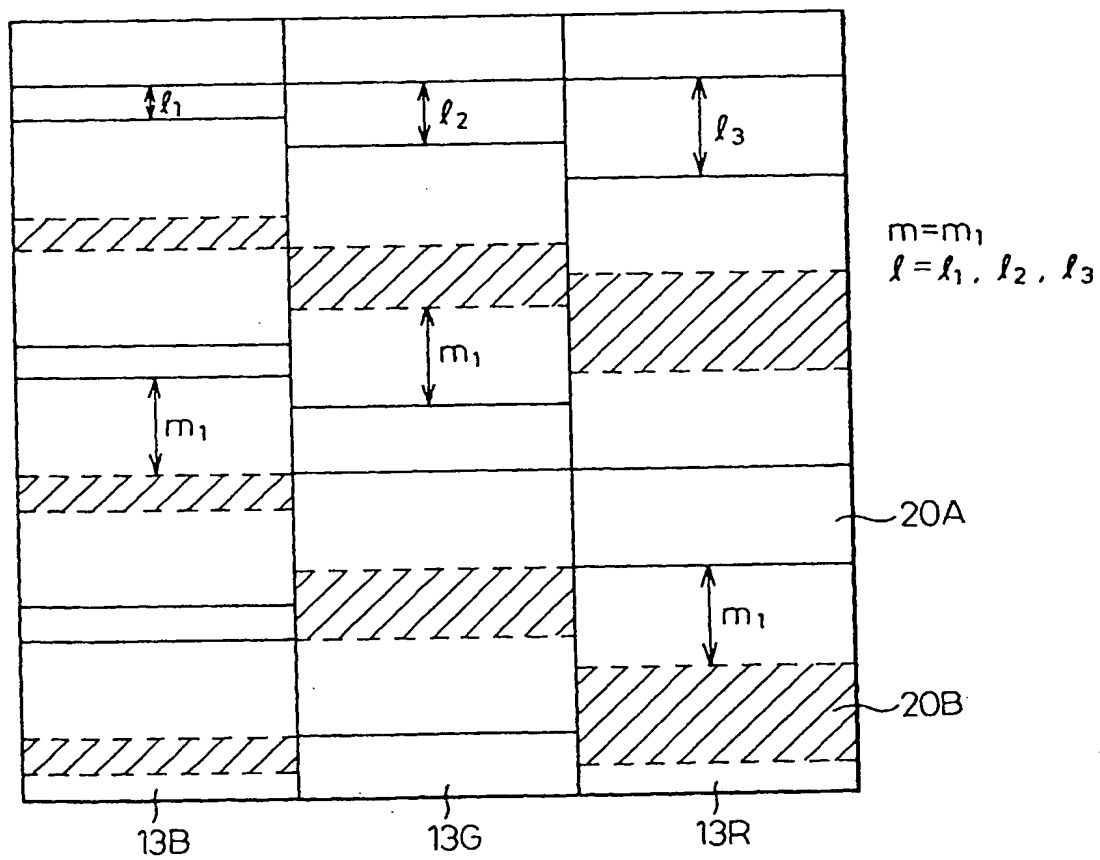
Fig.118
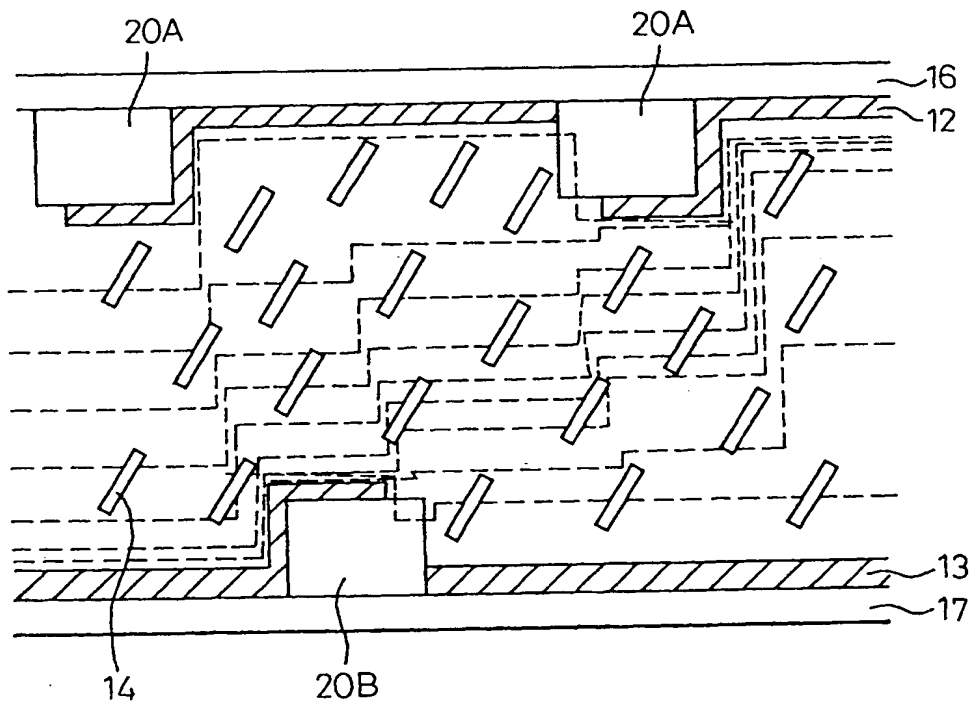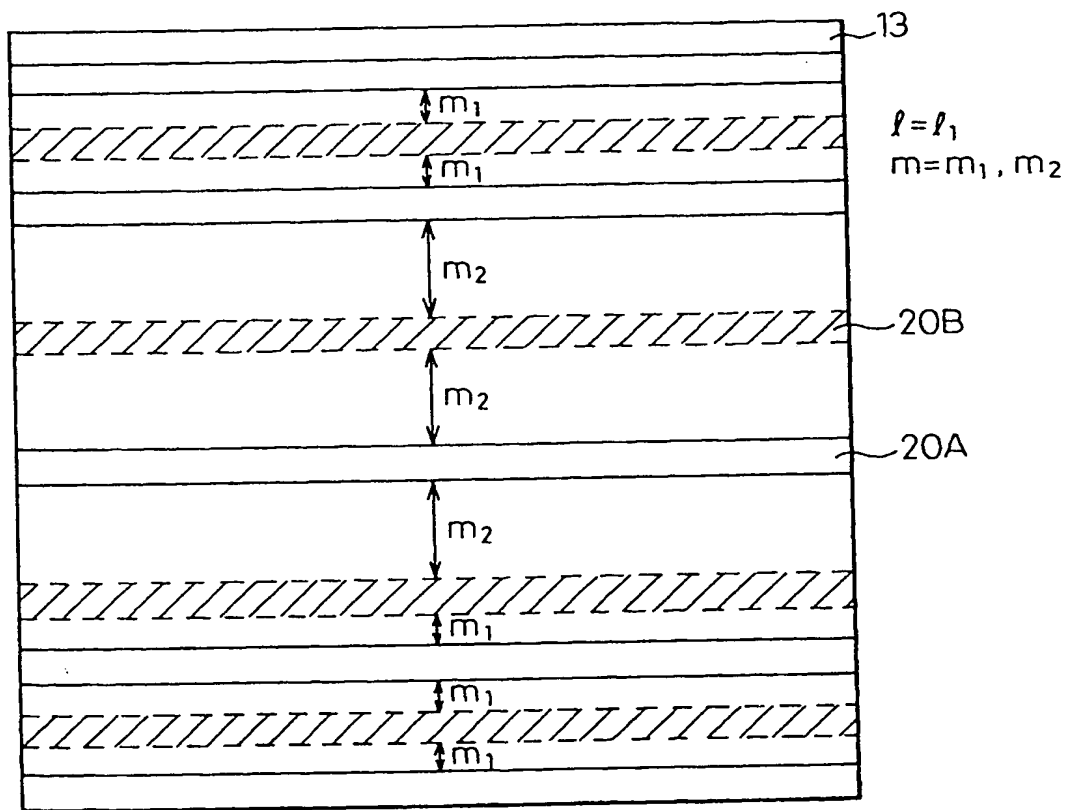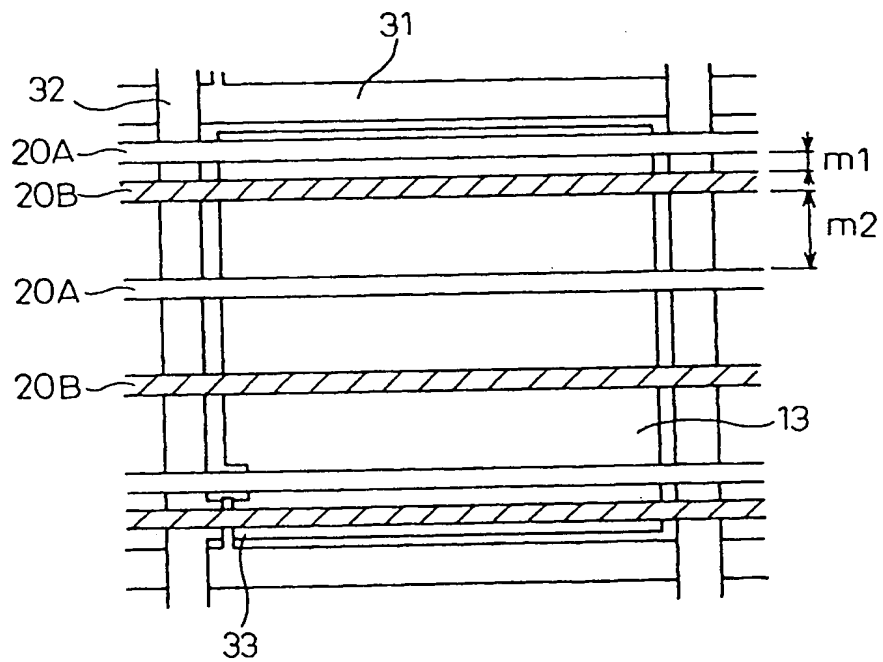
Fig.119

Fig.120

Fig.121

Fig.122

WHEN 5V IS APPLIED

TRANSMITTANCE (%)

HEIGHT OF AN PROJECTION (nm)
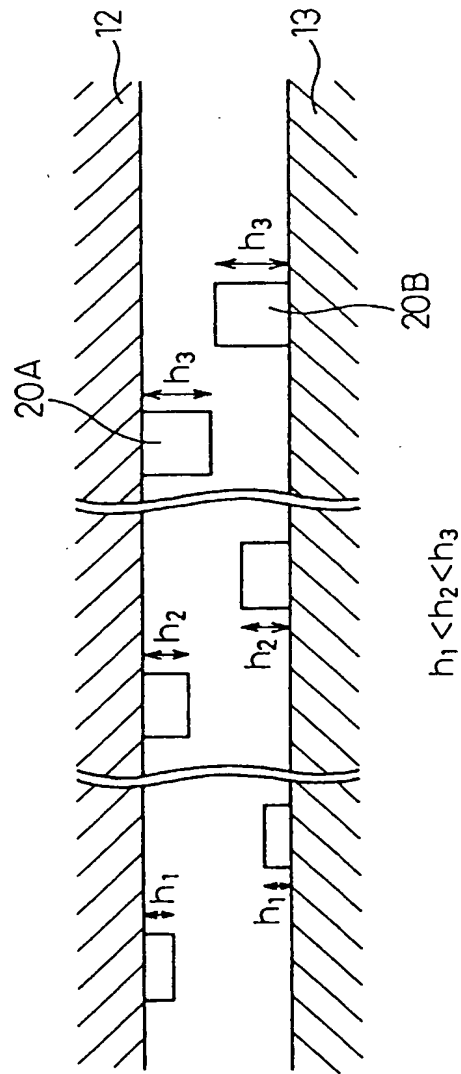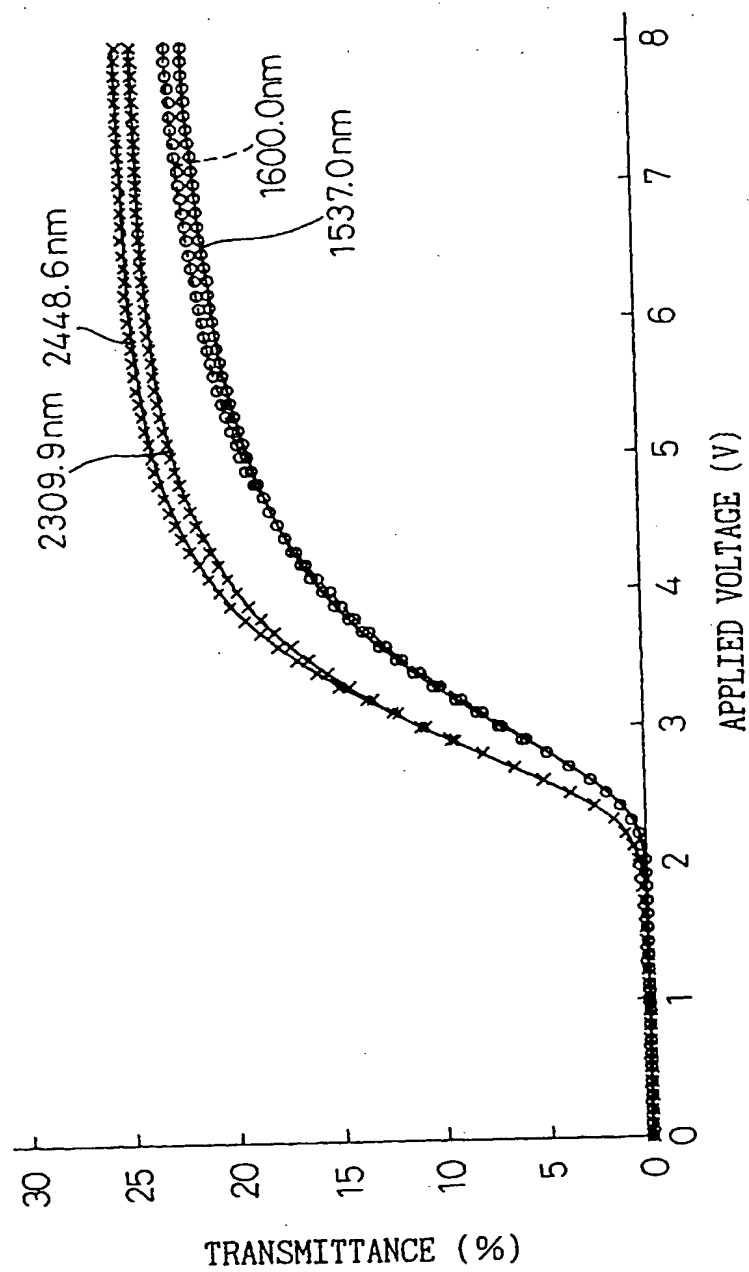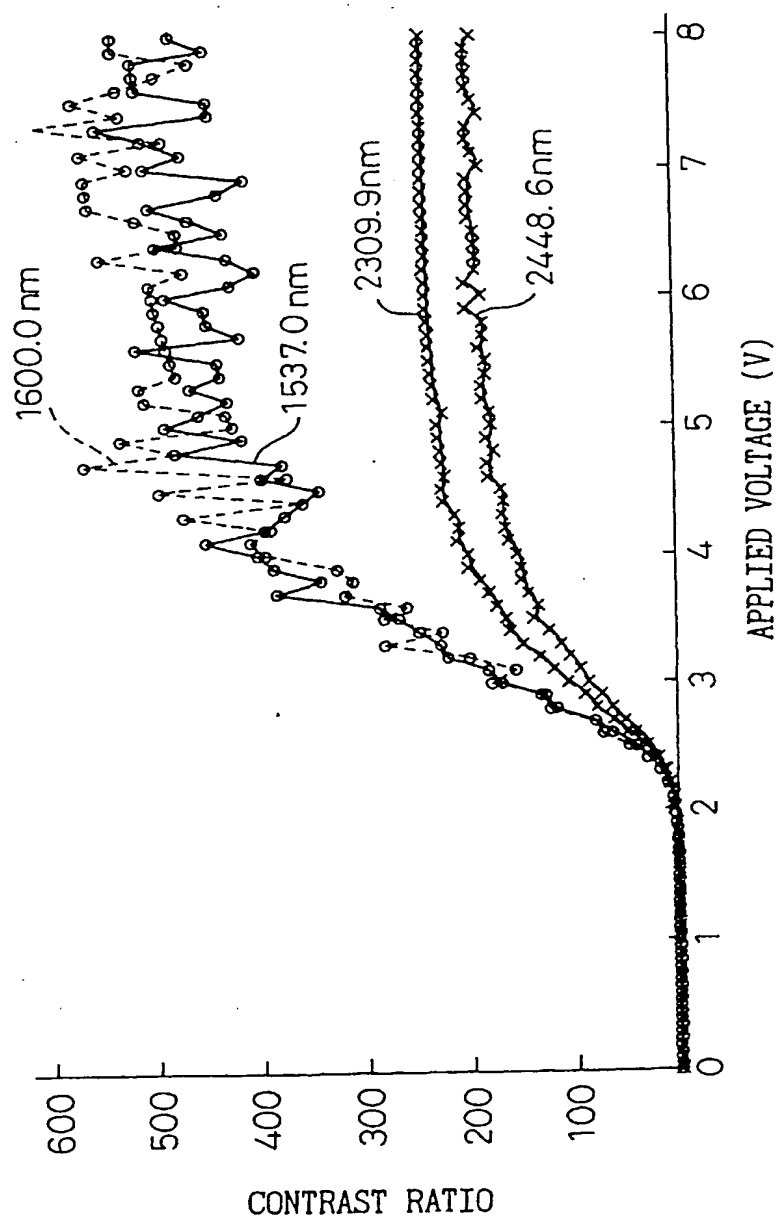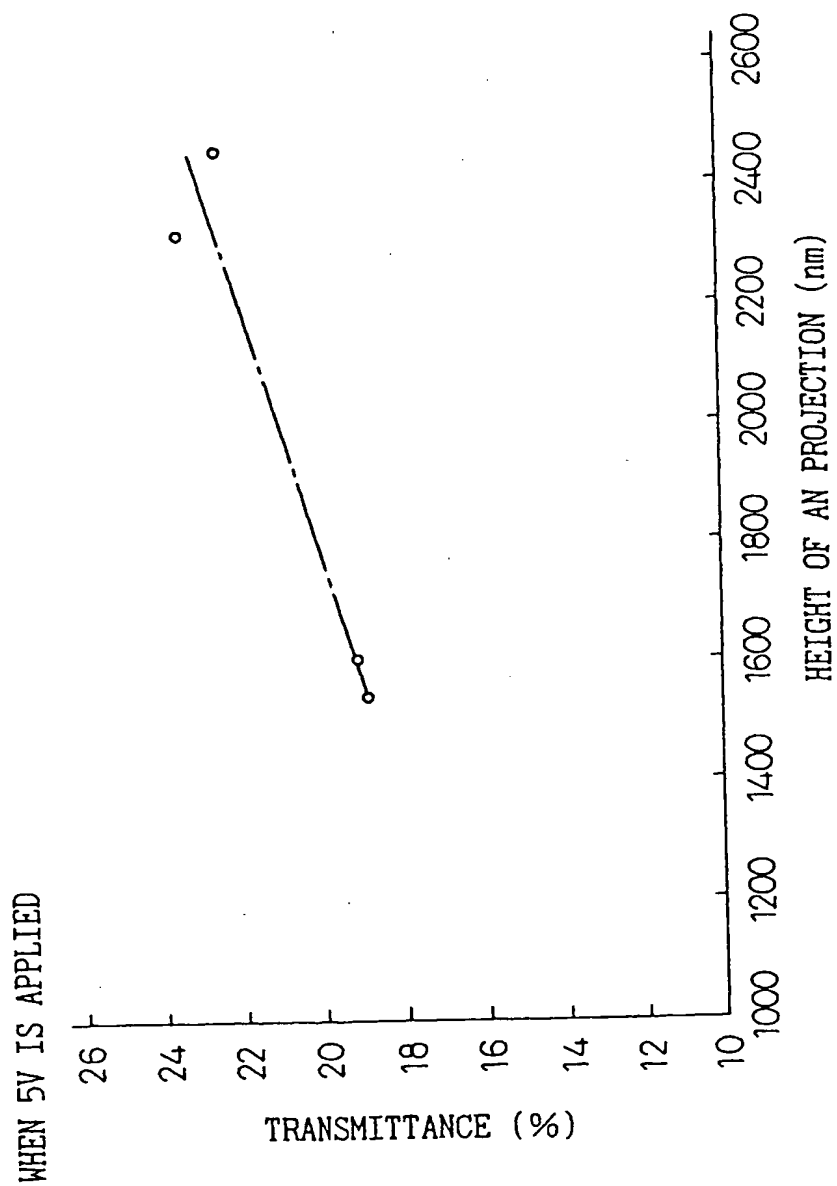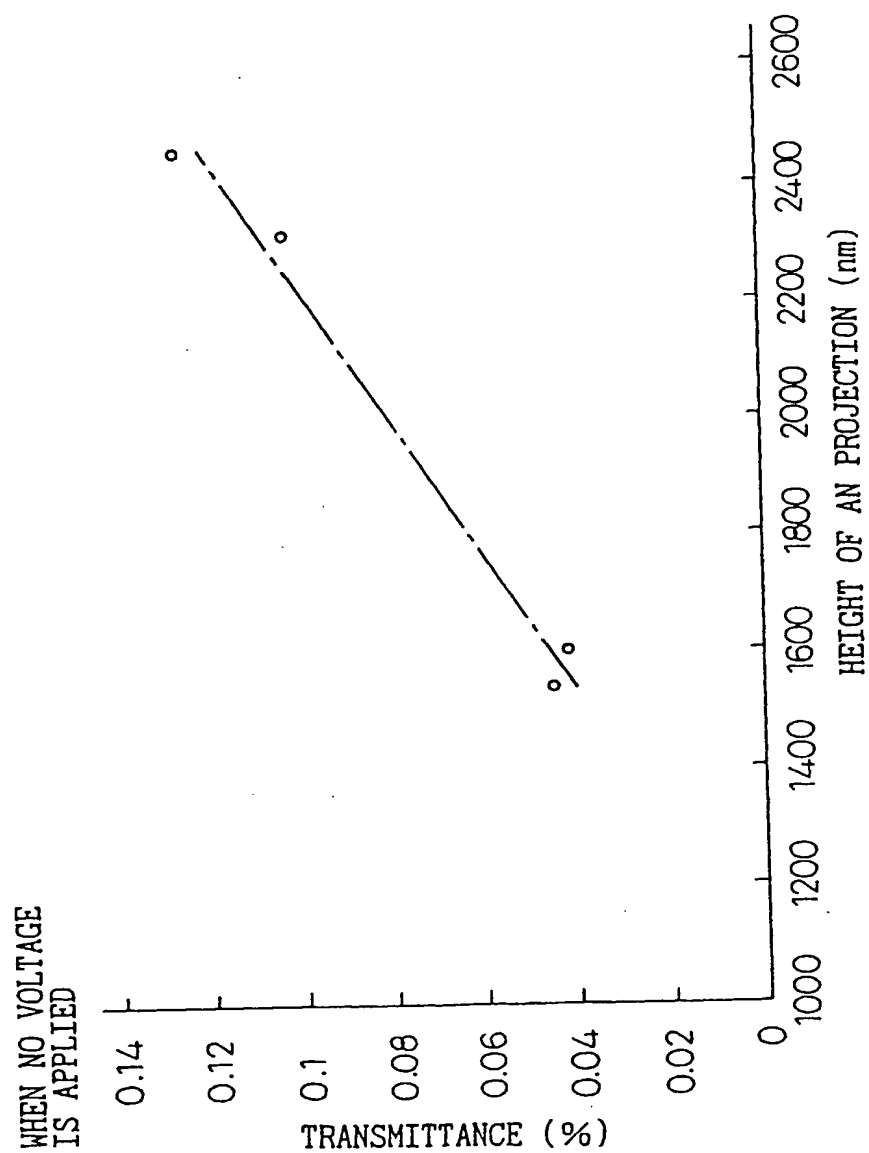
Fig.123

Fig.124A

Fig.124B

Fig.125A

TAPER ANGLE: θ

20

12,13

Fig.125B

θ_3

θ_2

θ_1

12,13

20

$\theta_1 < \theta_2 < \theta_3$
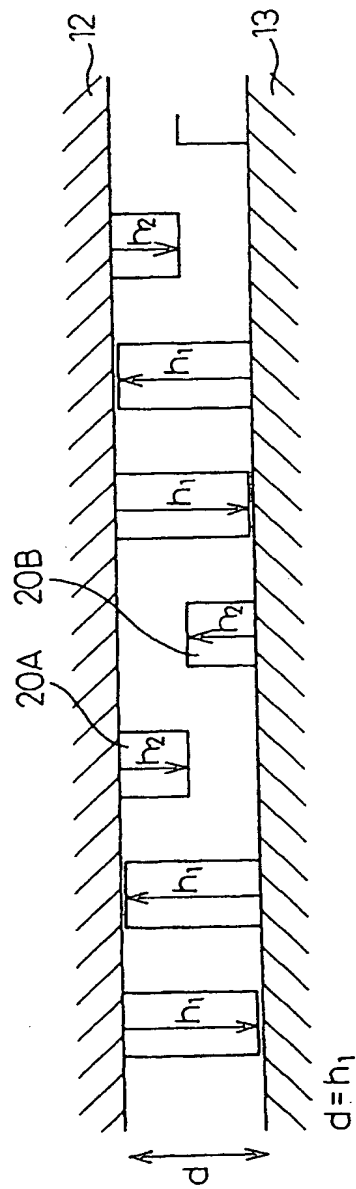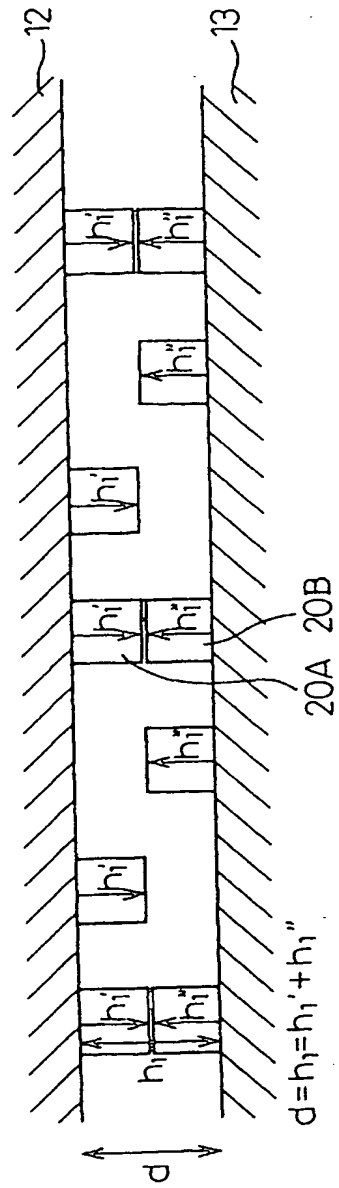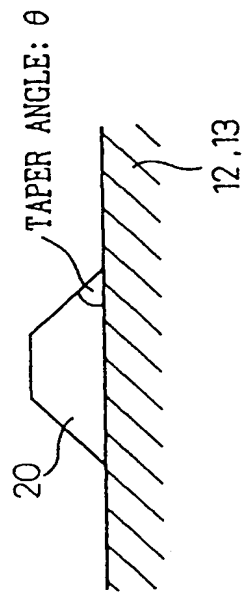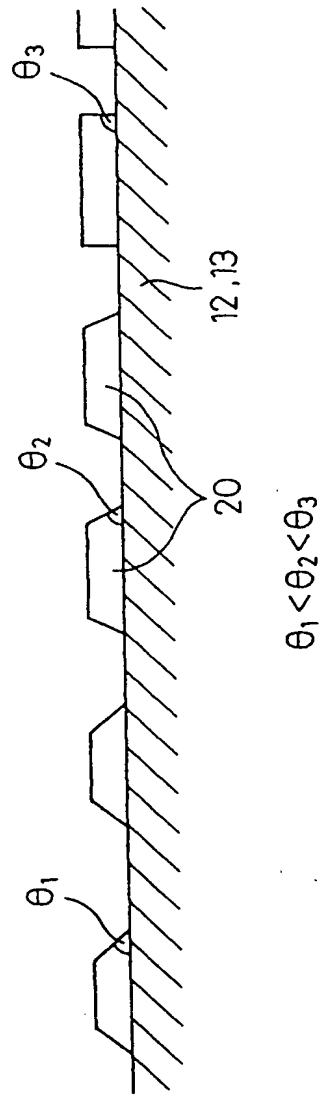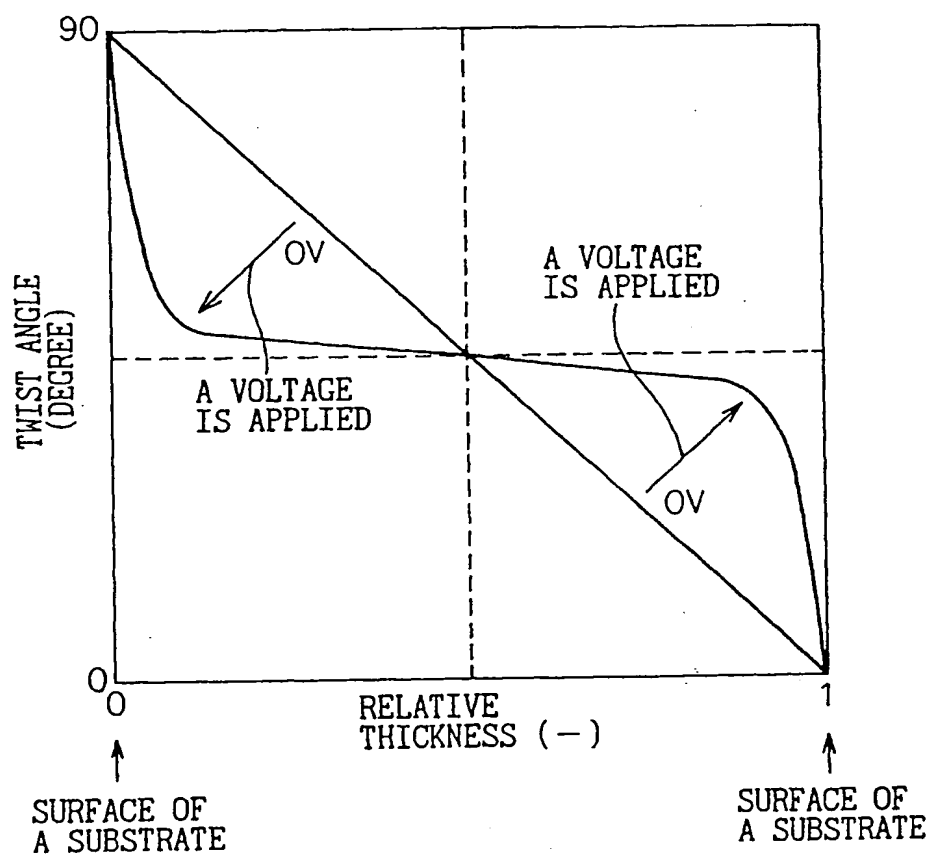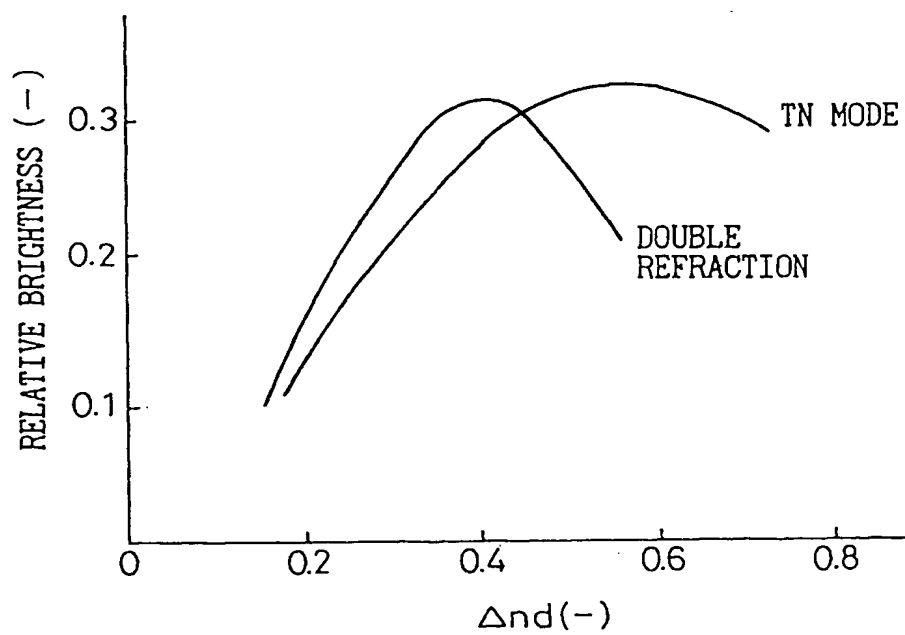
Fig .126

Fig.127

Fig .128

Fig.129

Fig .130

F i g . 131
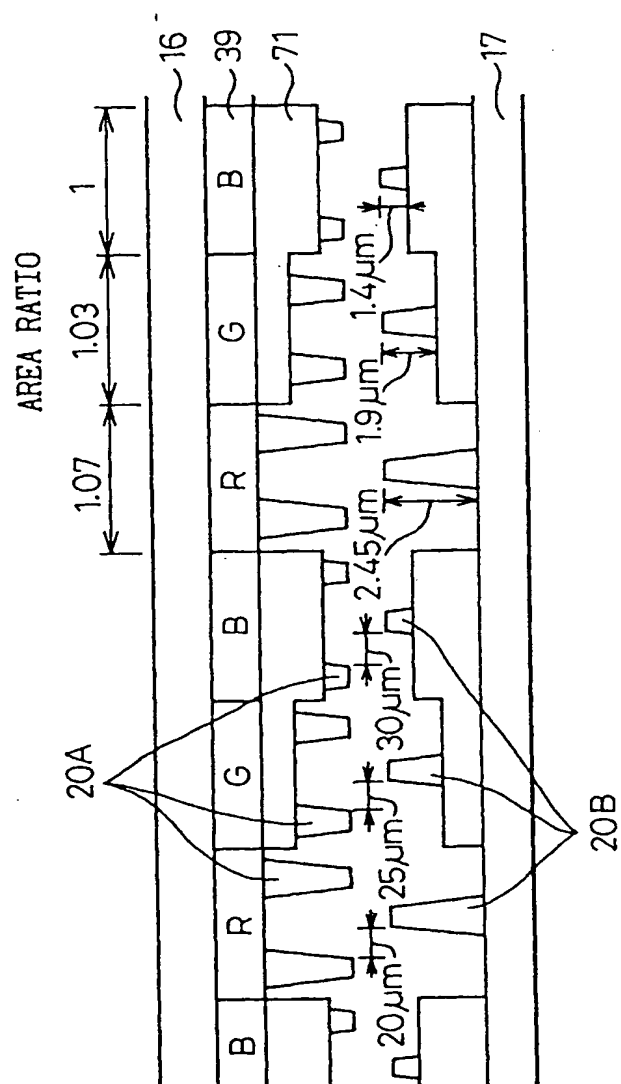
Fig.132

Fig.133

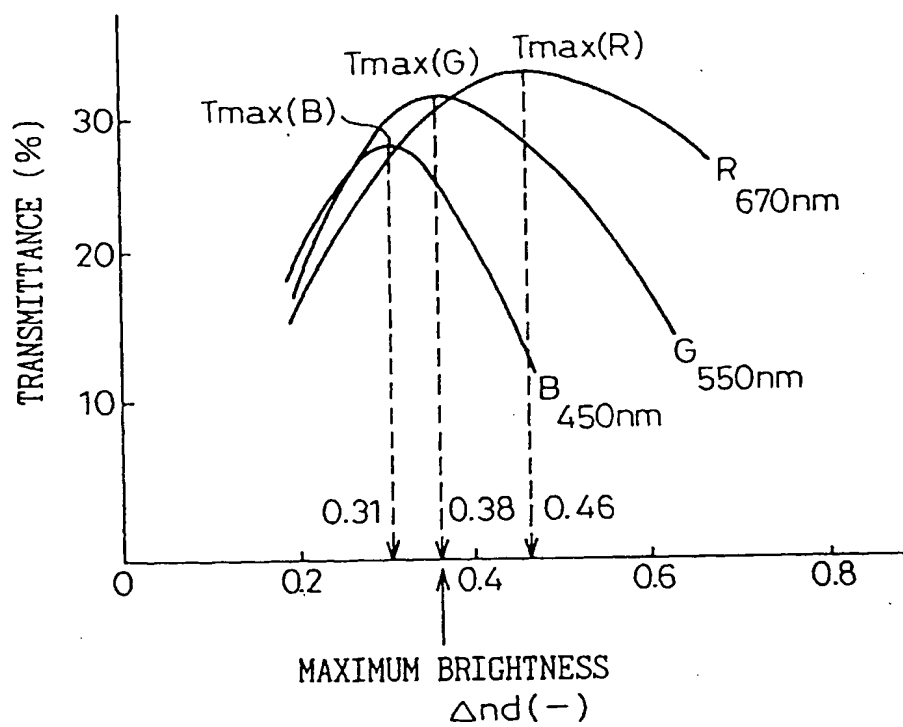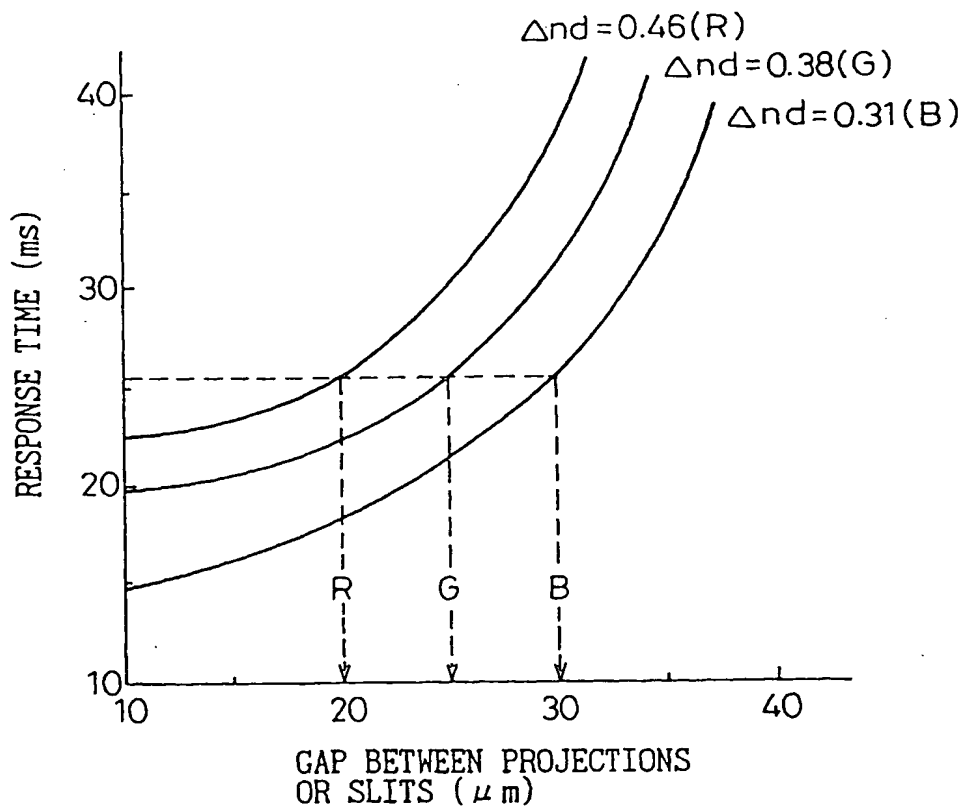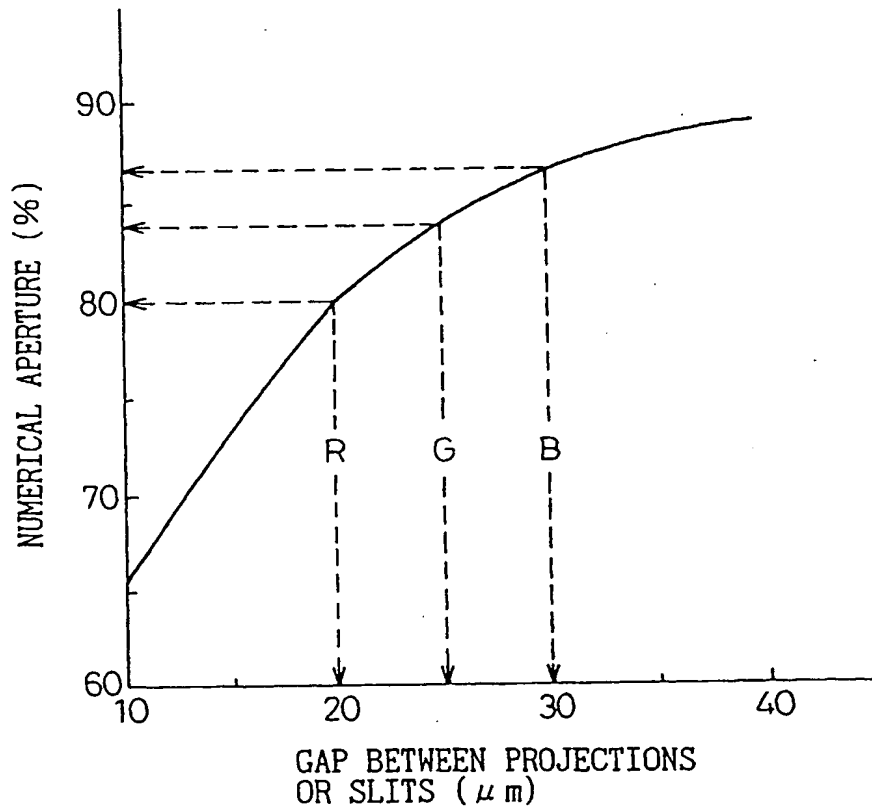# Fig.134A

Fig.134B
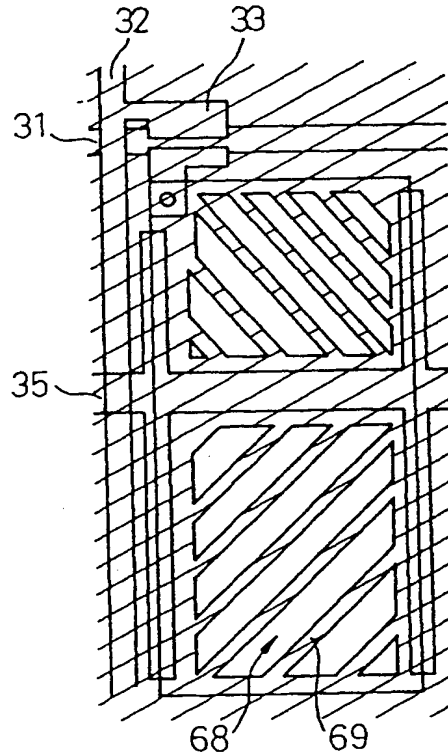
Fig.135

Fig.136A   Fig.136B
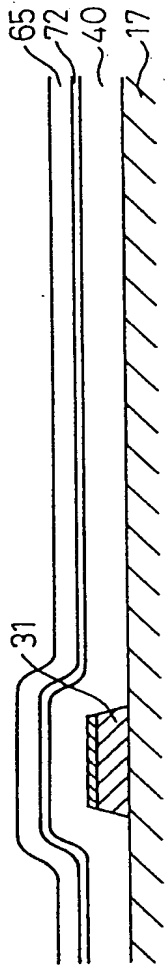
Fig.137A

Fig.137B

Fig.137C

Fig.137D

65
72
40
17

31

65

41

42

43

13

43B
40B
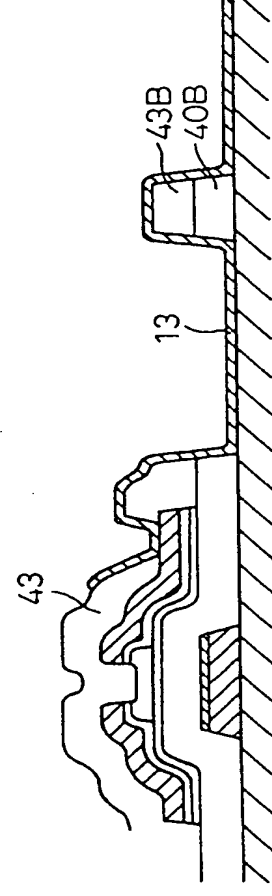
楊忠道經理，由於 920617－U1 超薄膜鋁合金高速壓鑄方法

整個製作的過程，客戶所提供的資料並不完整。

故，請創宇公司提供以下的事項：

1、　鋁合金高速壓鑄方法*詳細完整的製作流程*

例如：製作的步驟、製作過程及使用的機器。
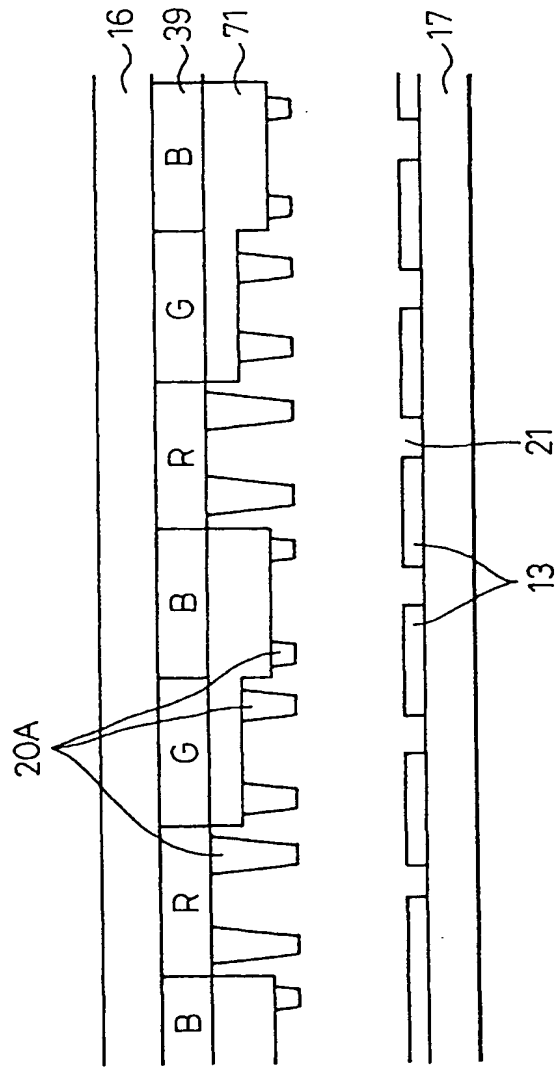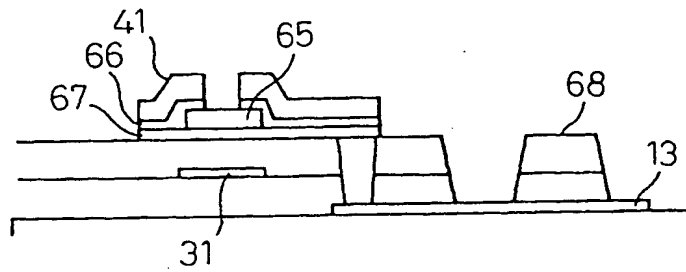
2、鋁合金高速壓鑄時，*金屬溶液溫度、模具的溫度與射出速度*在製作上參數的設定，及配合製作過程的

情形。

從台北所　工程師　周文正　92/11/14　AM10：19

謝謝。

Fig.138

Fig.139A

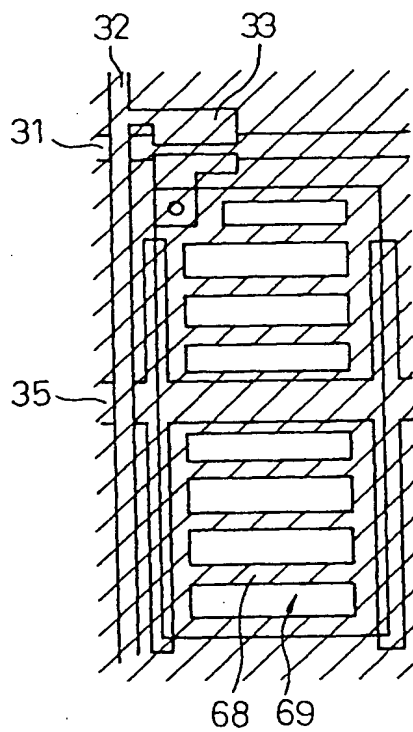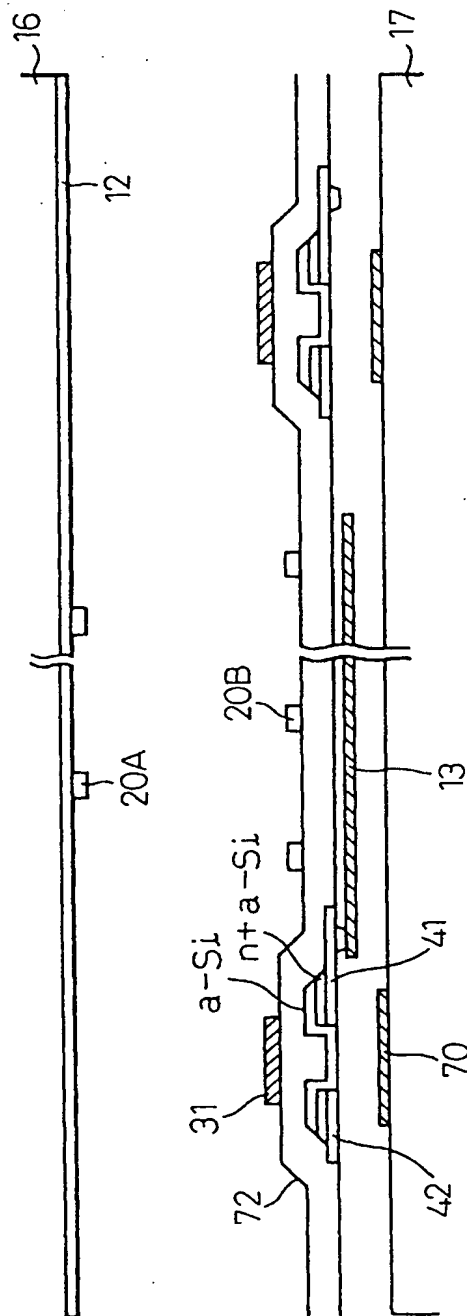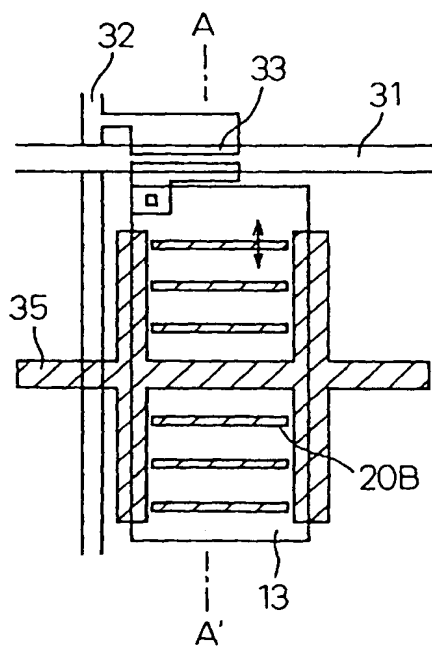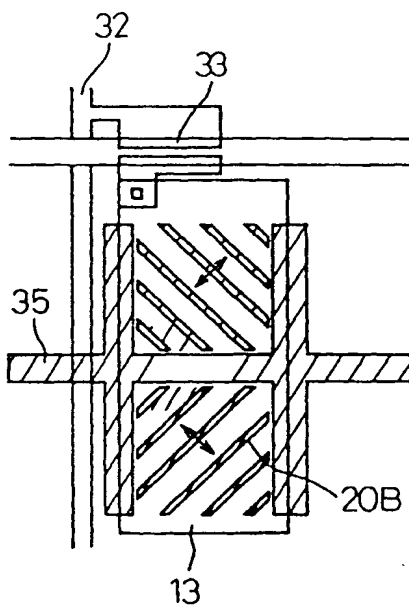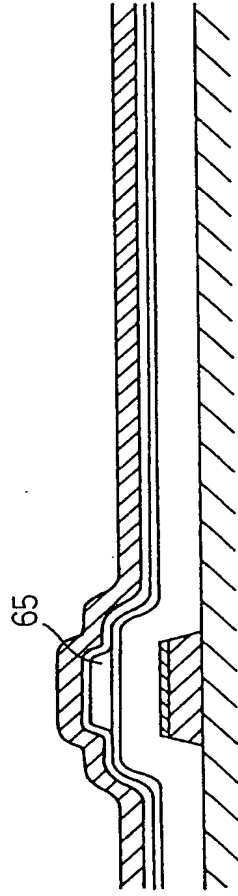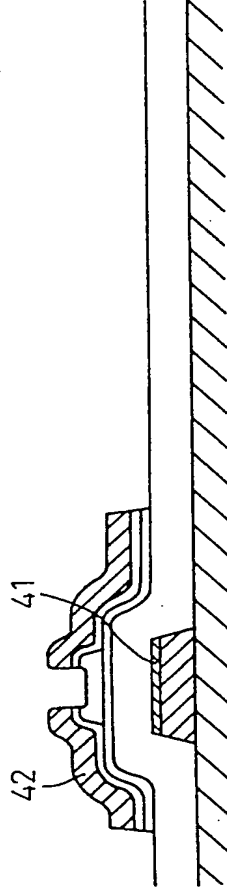Fig.139 B

Fig.139C

Fig.139D
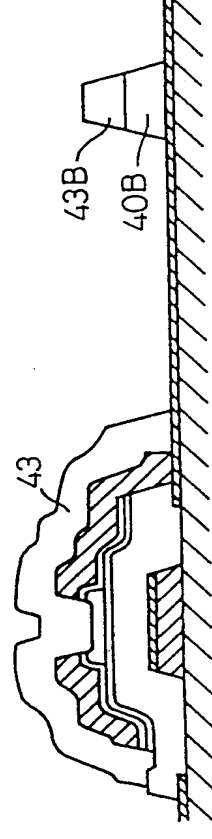
Fig.139E

Fig.140A

Fig.140B

Fig.141A

7μm

Fig.141B

7μm

5μm   20A

15μm   15μm   20B

Fig.142A

~12

Fig.142B

~351

~12

Fig.142C

~352

Fig.142D

~20

Fig.142E

~20
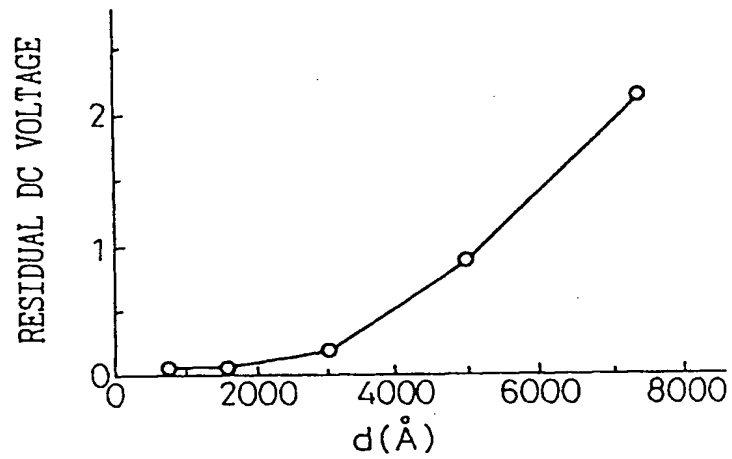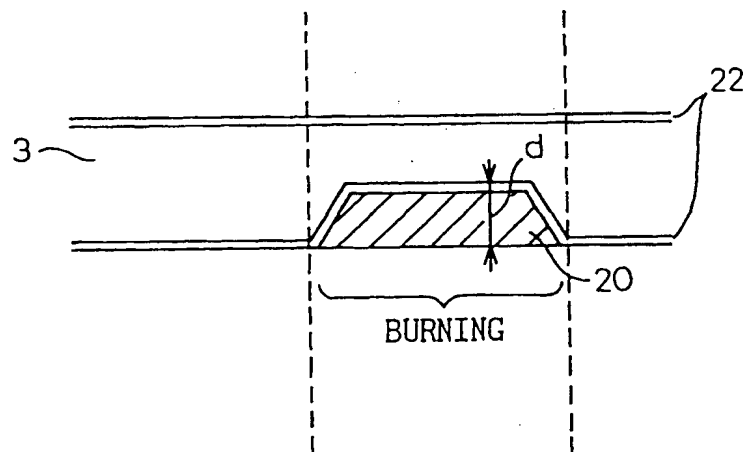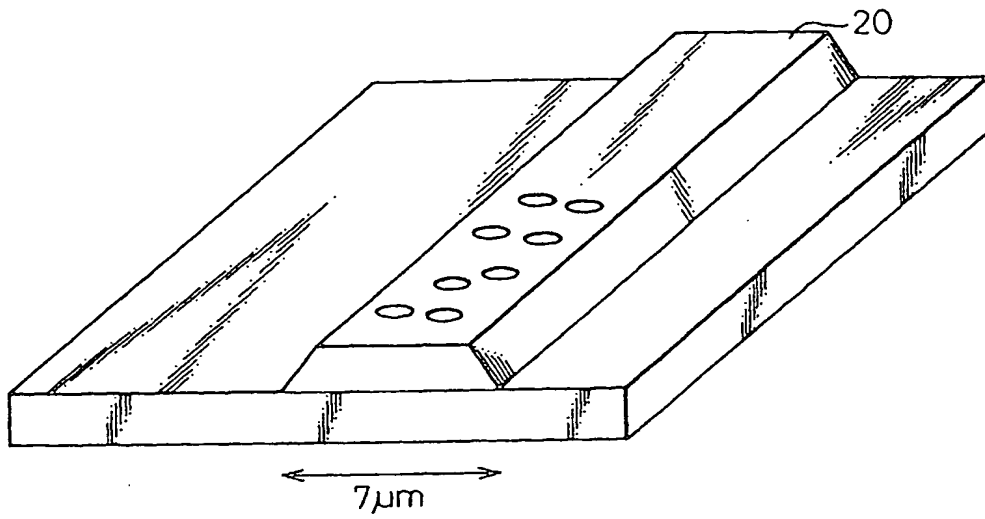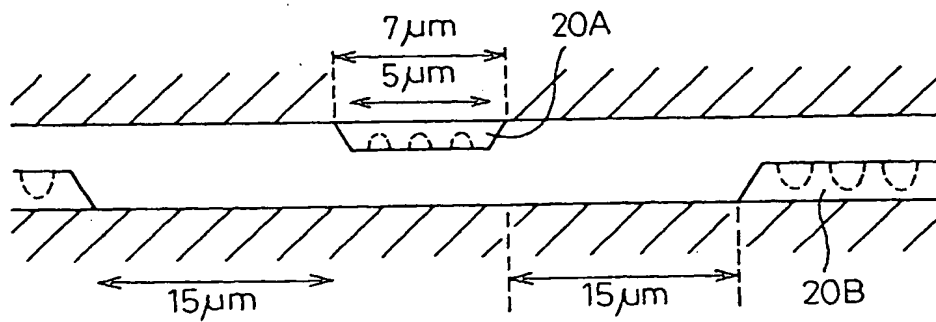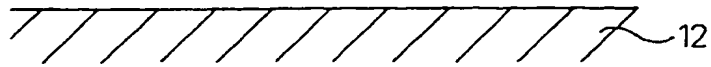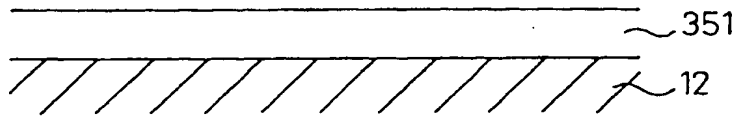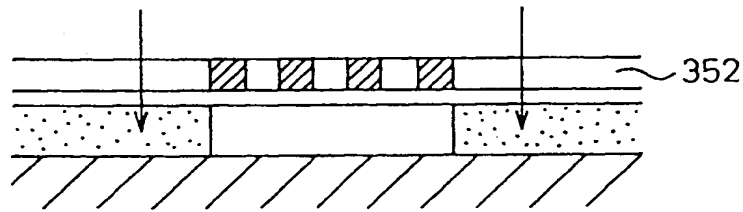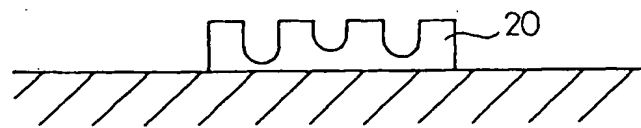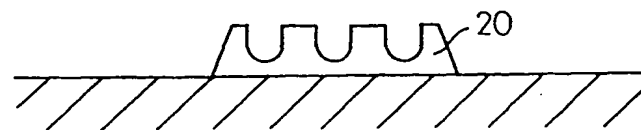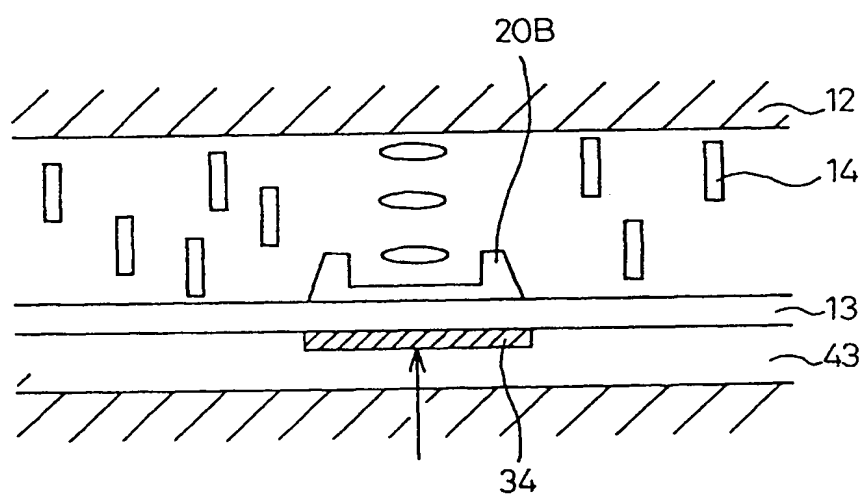
Fig.143

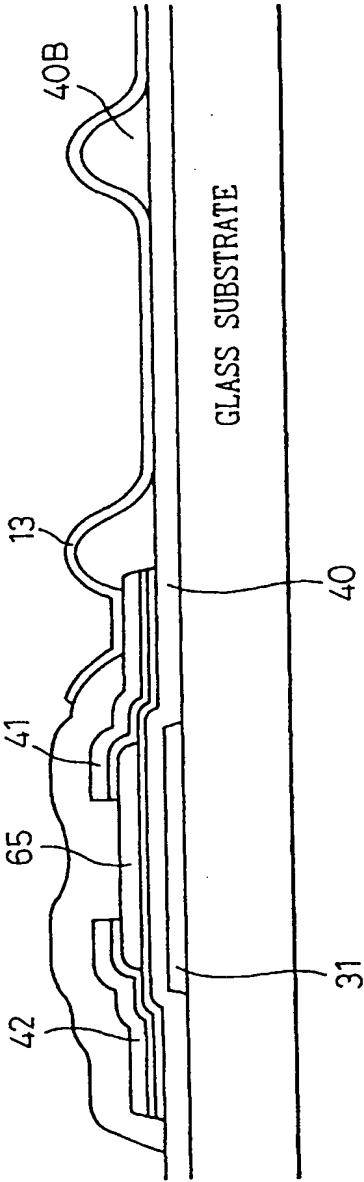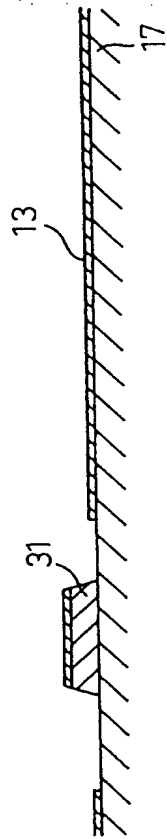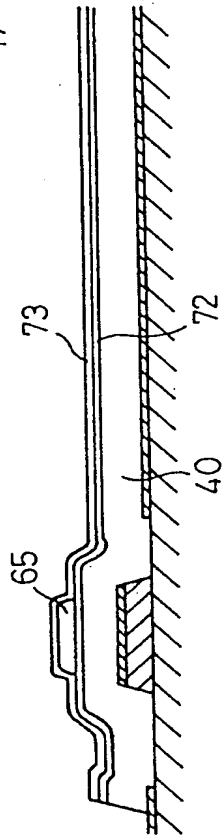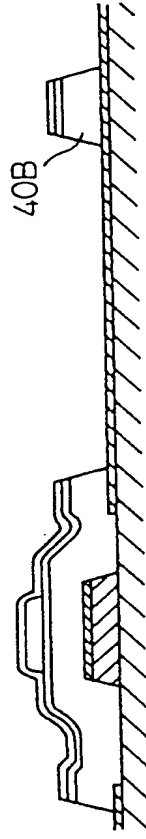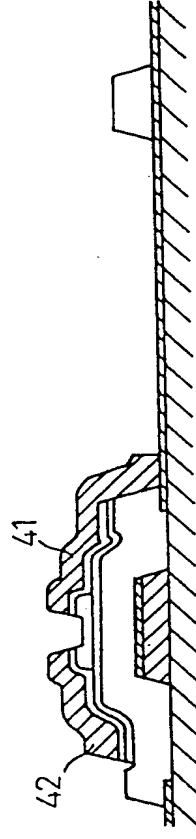# Fig.144A

BEFORE BAKING
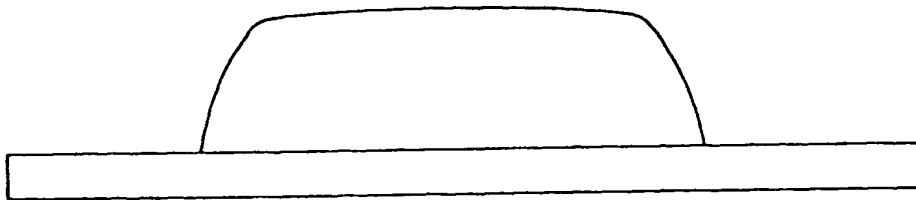
Fig.144B

AFTER BAKING

Fig.145A $^{\text{NO BAKING}}$

Fig.145B $^{120°C}$

Fig.145C $^{130°C}$

Fig.145D $^{140°C}$

Fig.145E $^{150°C}$
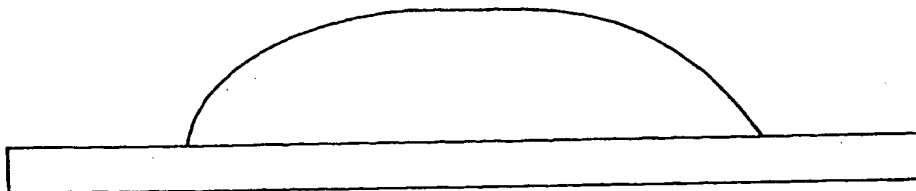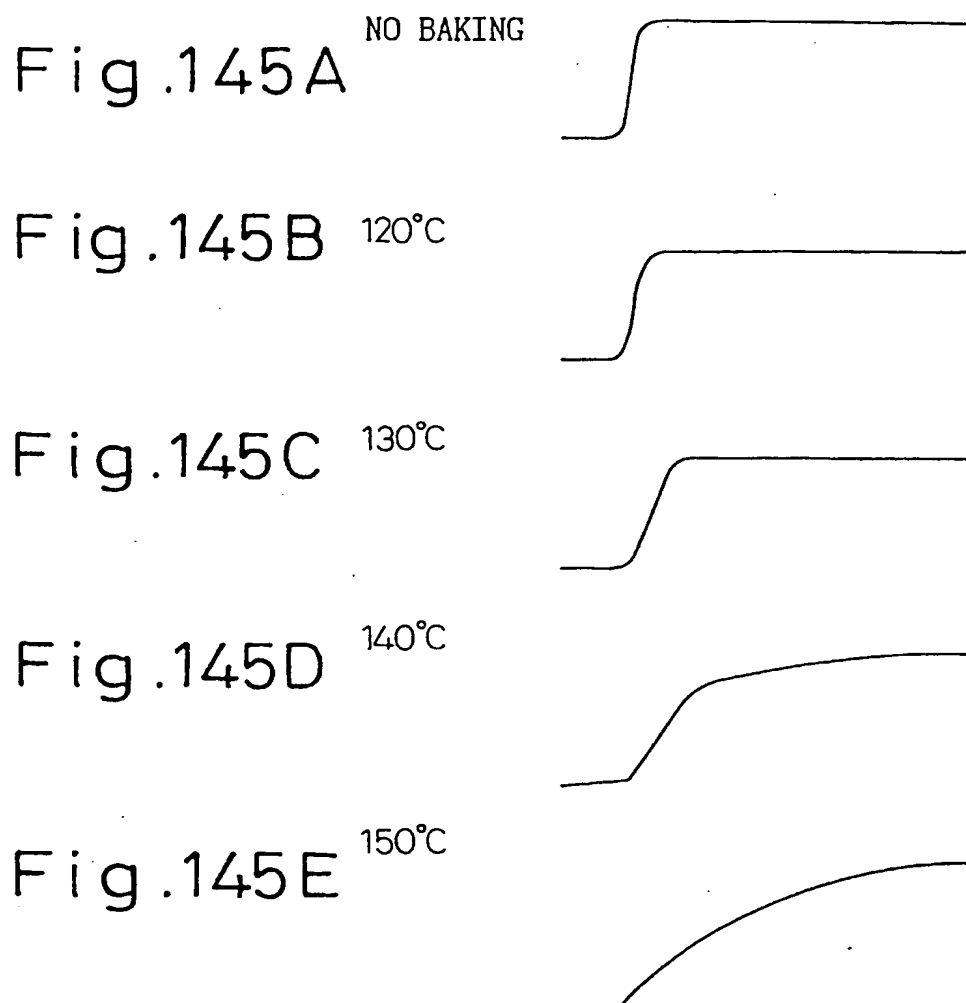
Fig.146A
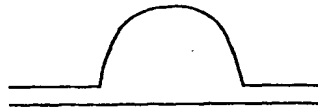
2μm WIDTH
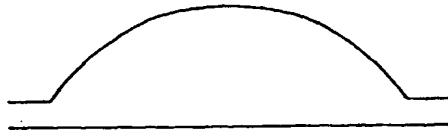
Fig.146B

5μm WIDTH

Fig.146C

10μm WIDTH
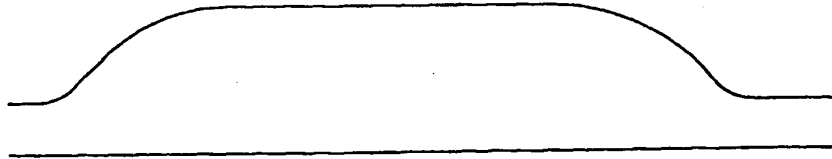
Fig.147A

Fig.147B

Fig.148A

O_3 , O^{2-}, $O\cdot$ $\quad$ H_2O , CO_2 etc.

20

13

Fig.148B

20'

Fig.148C

22
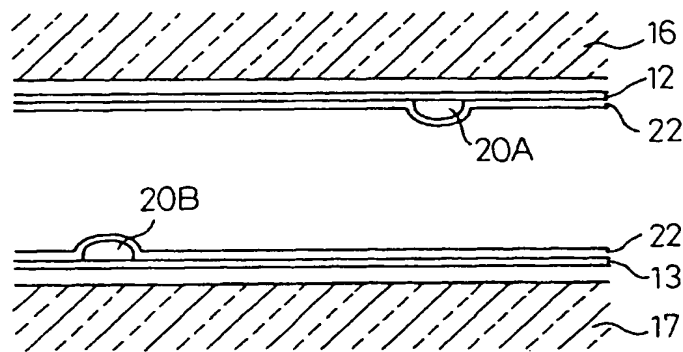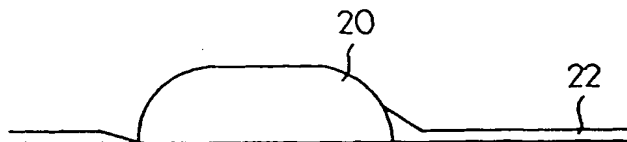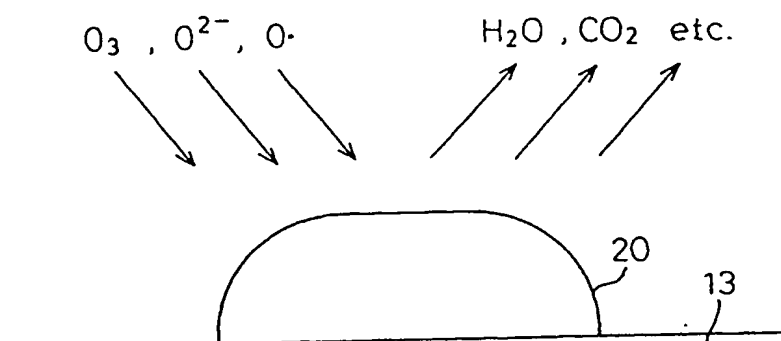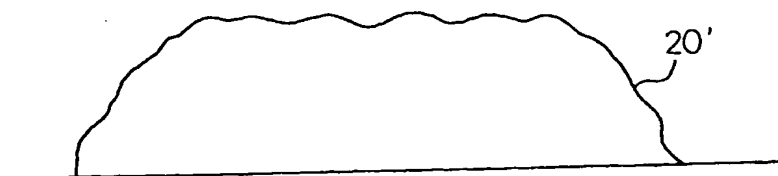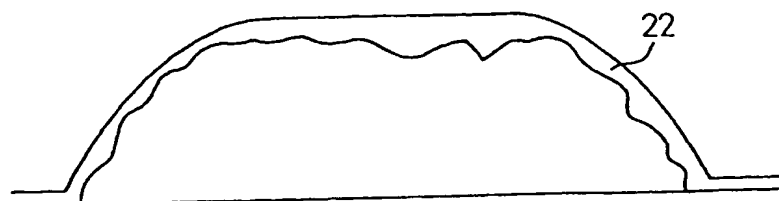
Fig.149A

Fig.149B

Fig.150

ULTRA-VIOLET LIGHT

↓   ↓   ↓   ↓   ↓
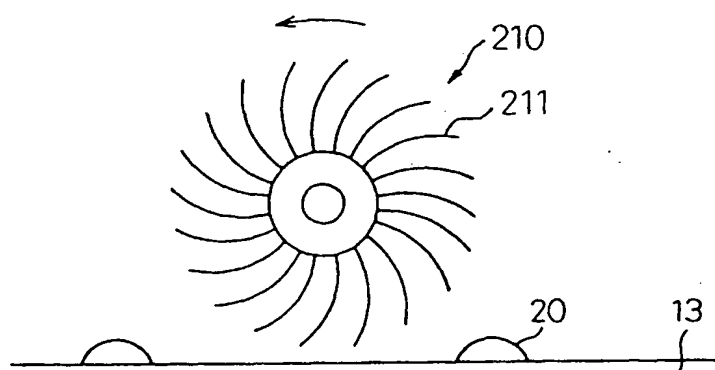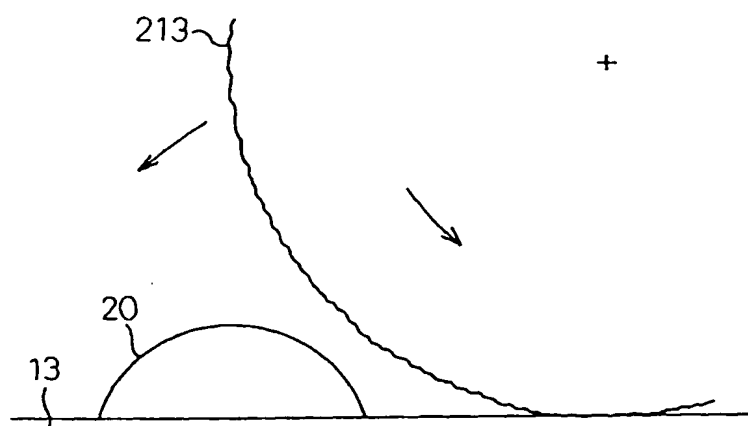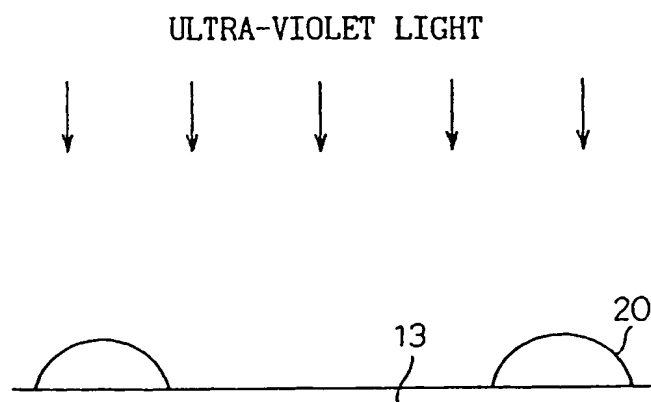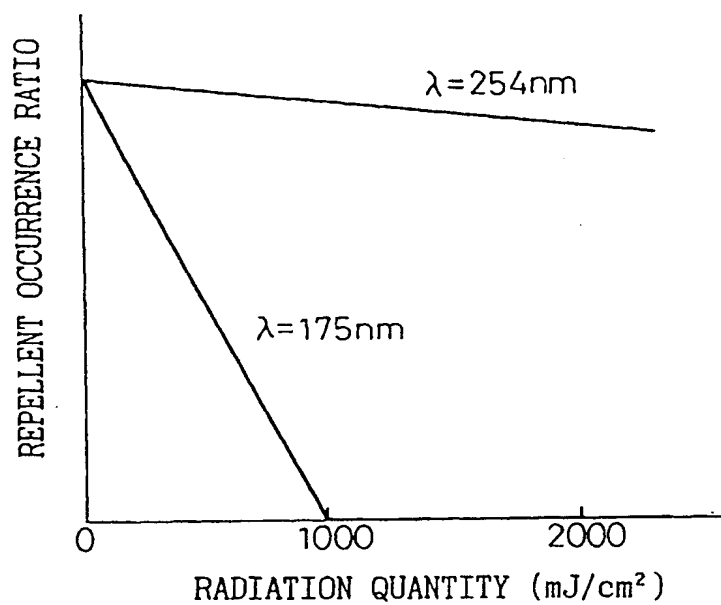
Fig.151A

Fig.151B
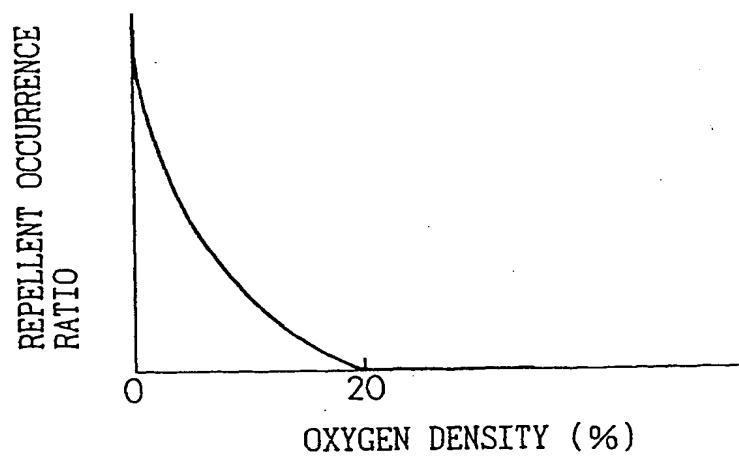
Fig.152A
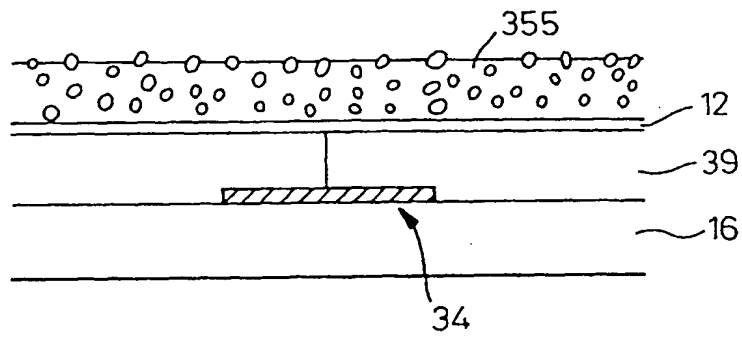
Fig.152B

Fig.152C

Fig.153A

357

12

39

16

34

Fig.153B

358

Fig.153C

359

20A

Fig.154A

361
360
12
39
16

Fig.154B

362
361
20A
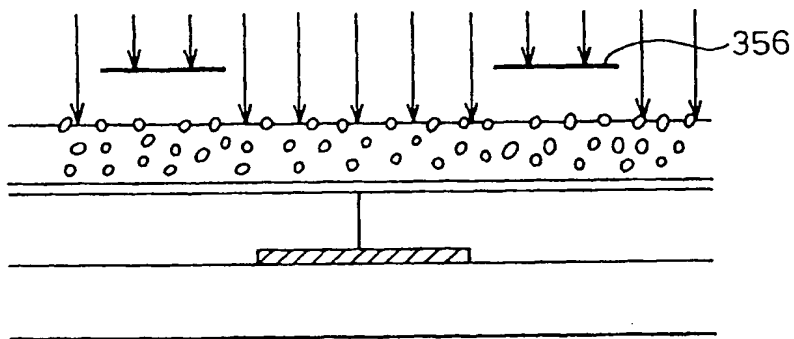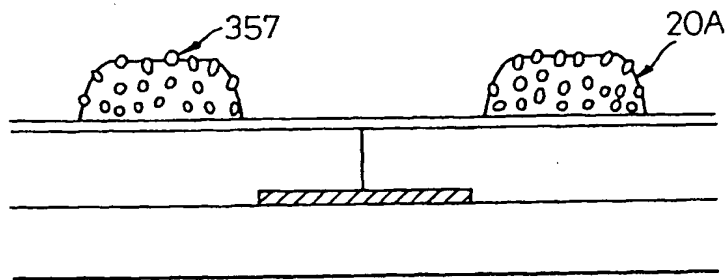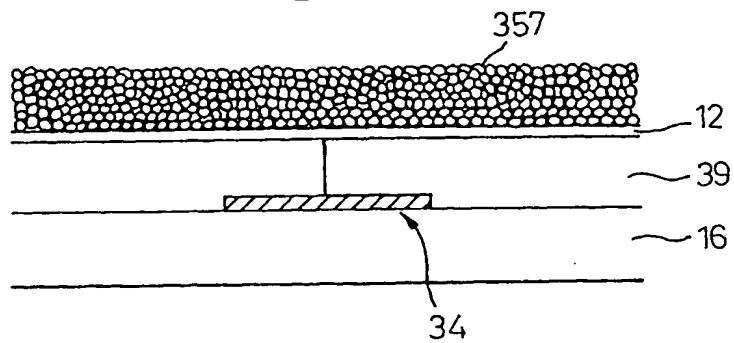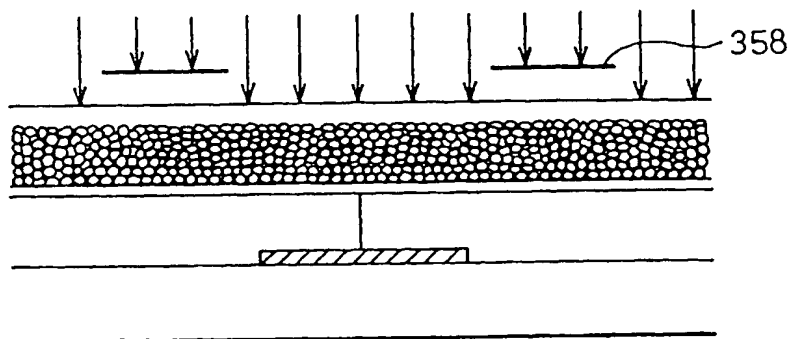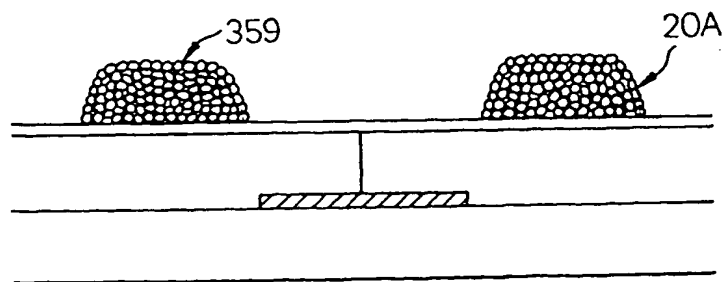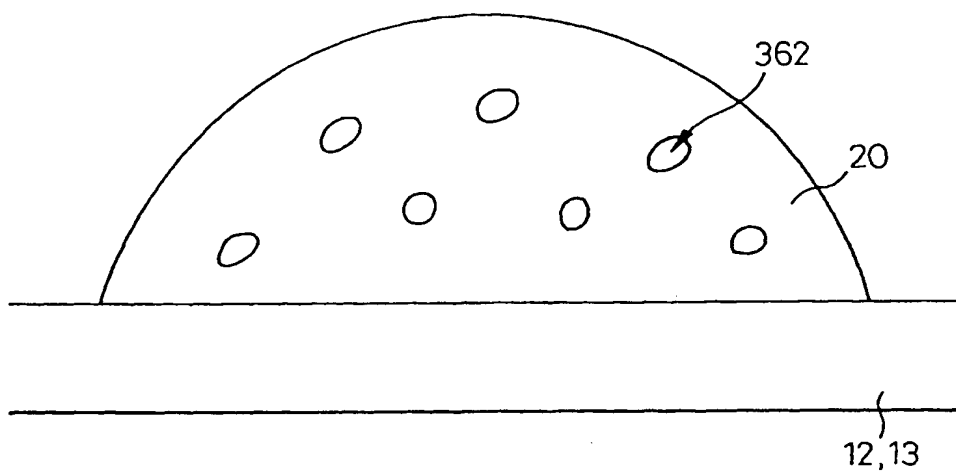
Fig.155A

Fig.155B

Fig.156

Fig.157A

365   366

Fig.157B

20

Fig.157C

22

20
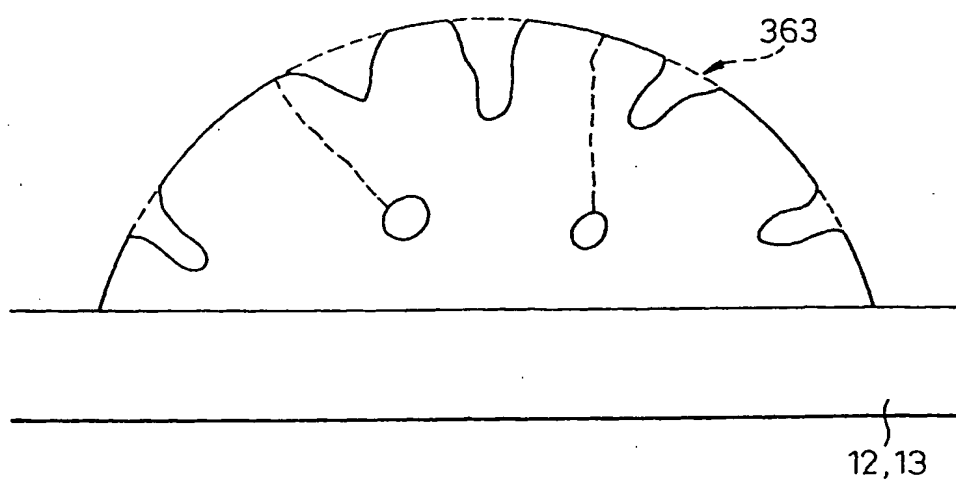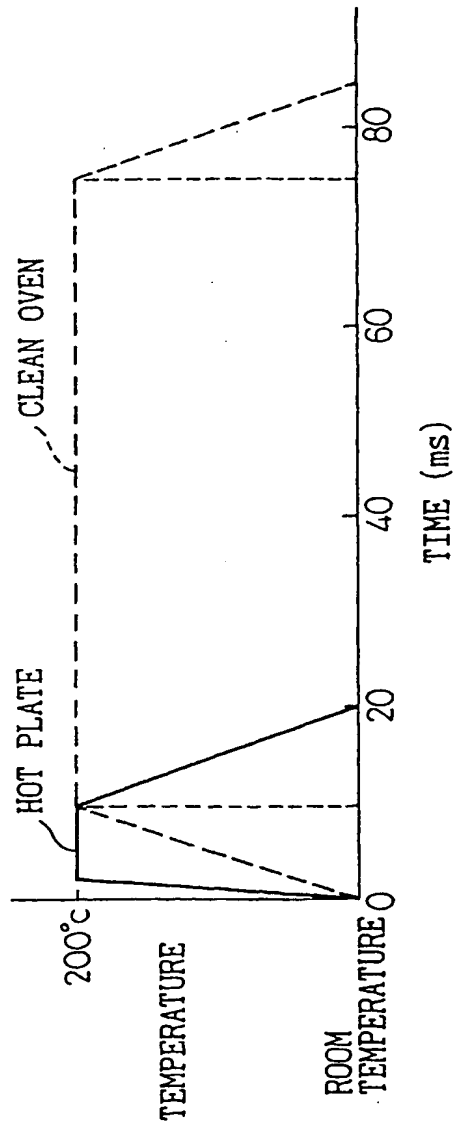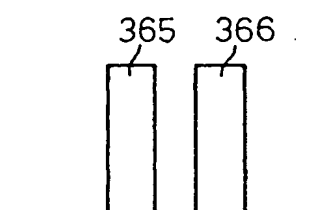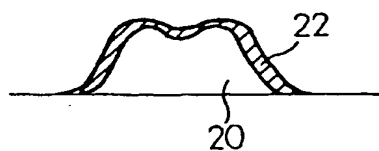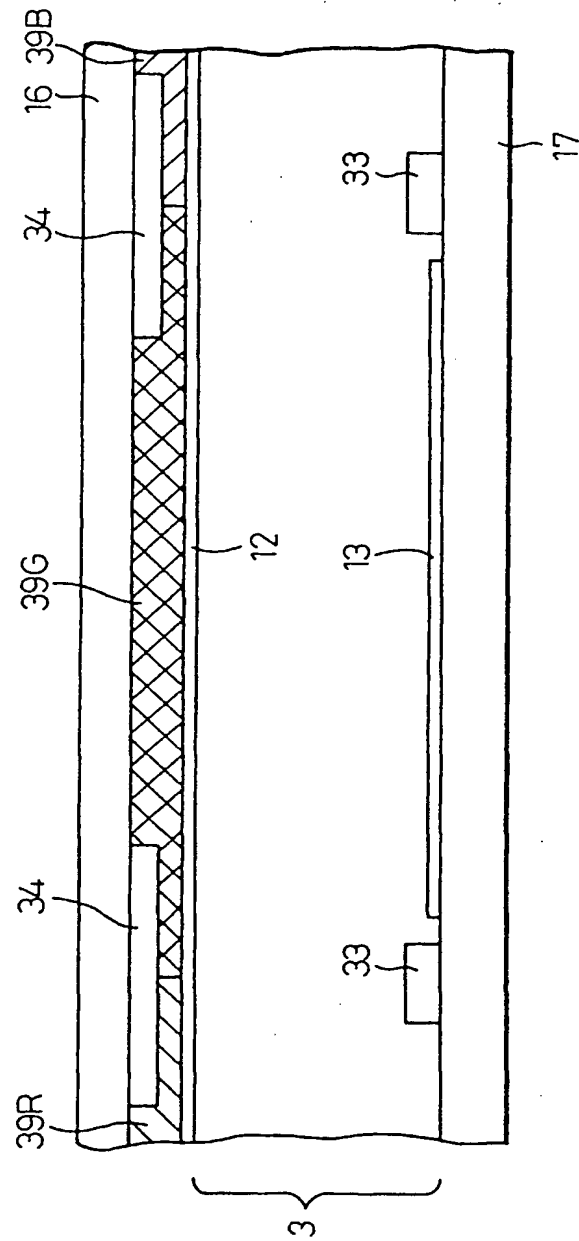
Fig.158

Fig.159
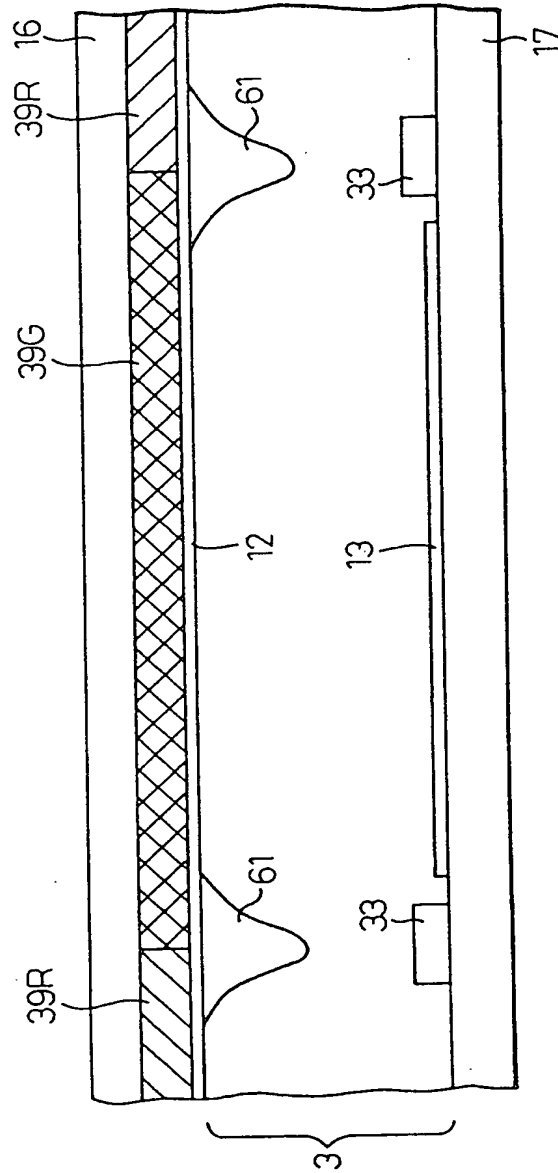
Fig .160
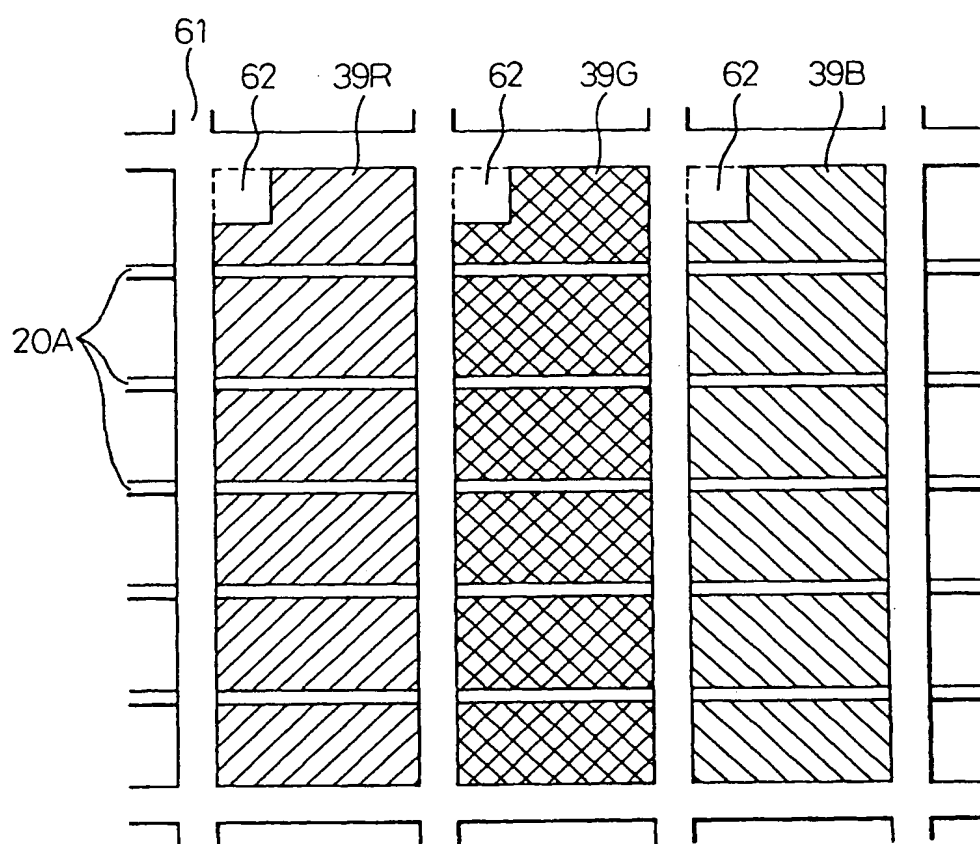
Fig .160

Fig.162

Fig.161

34
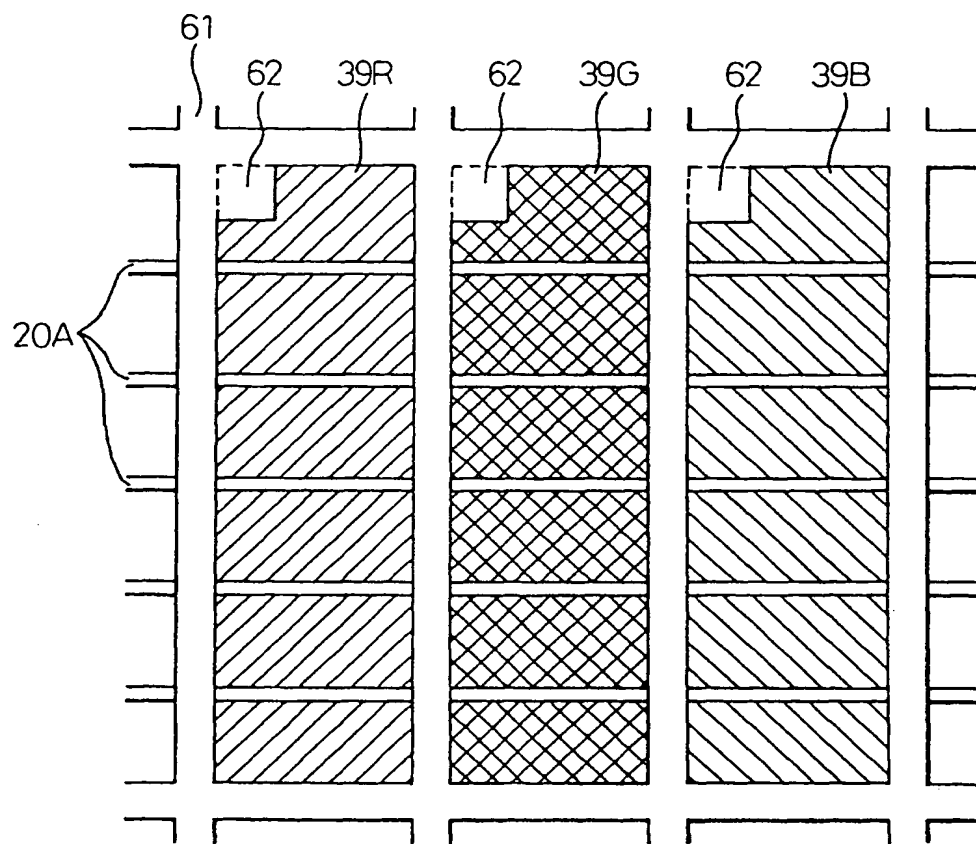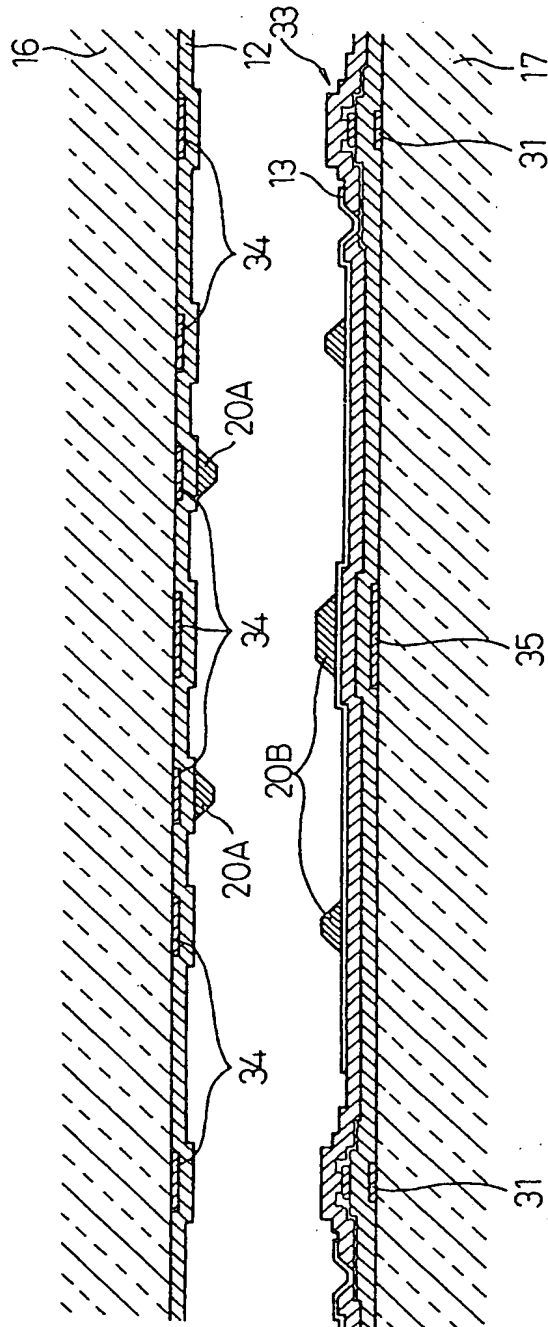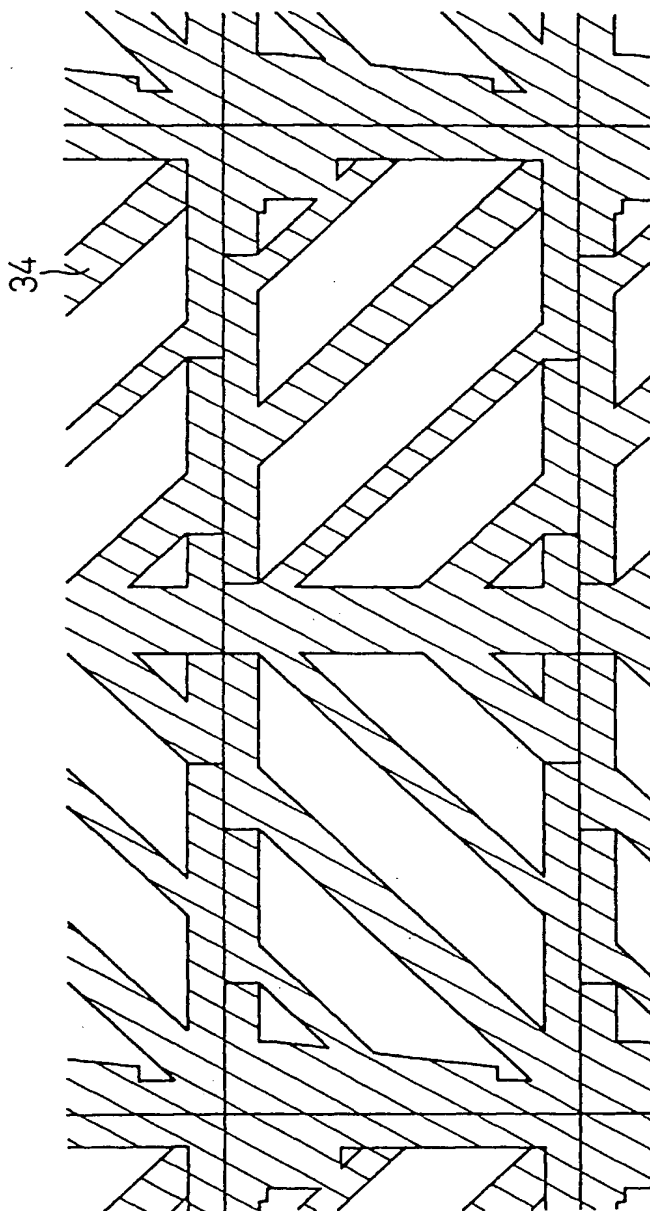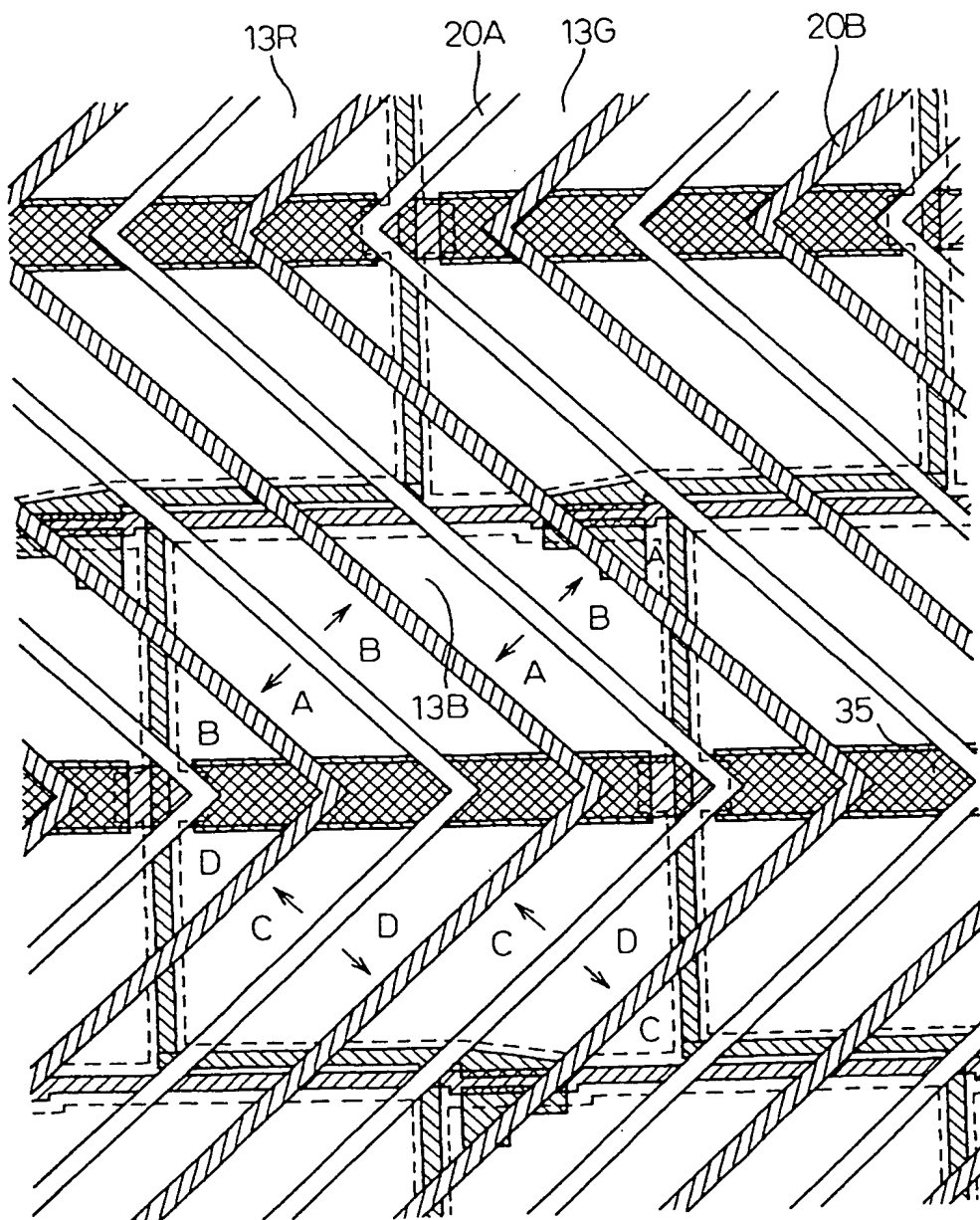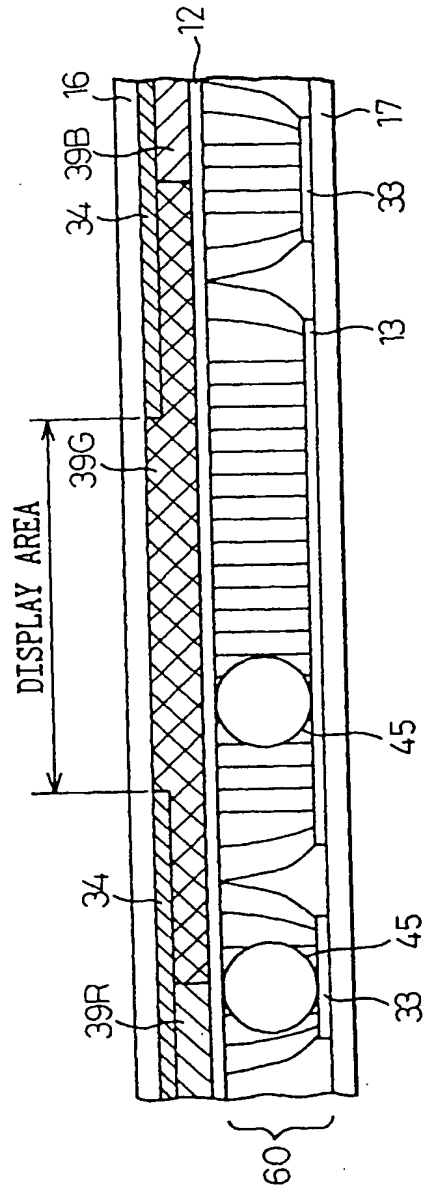
Fig.163

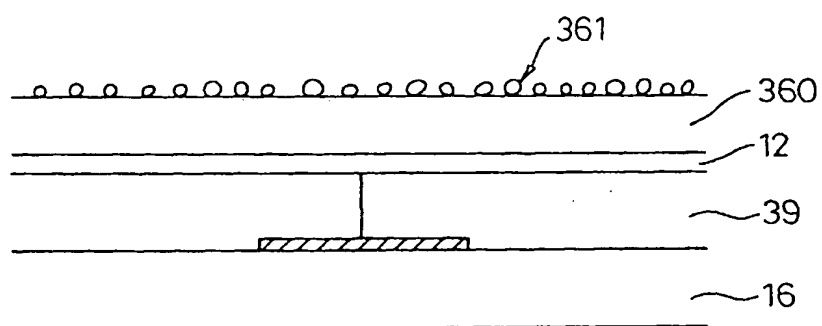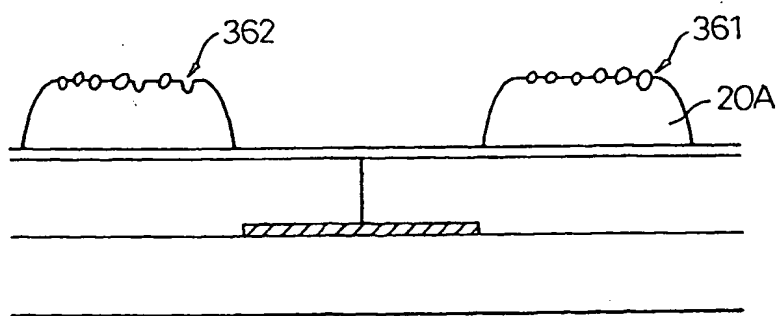Fig.164

Fig.165A
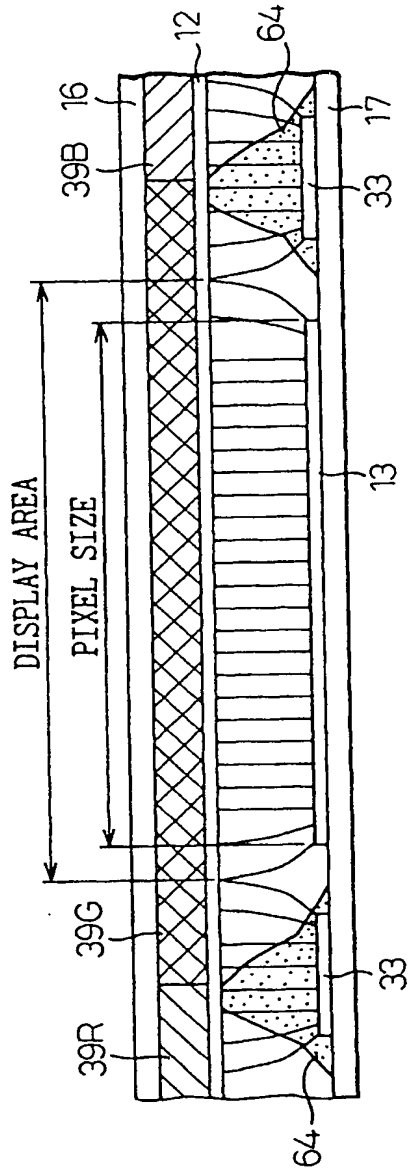
Fig.165B
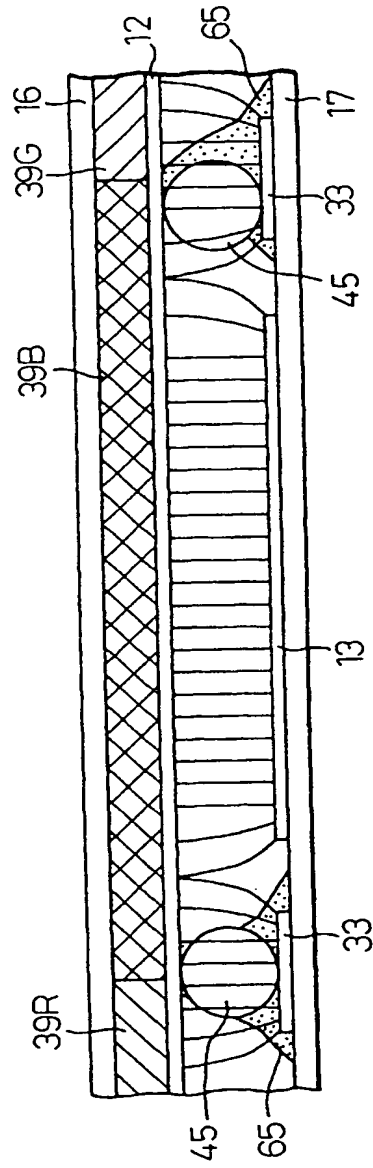
Fig.166A
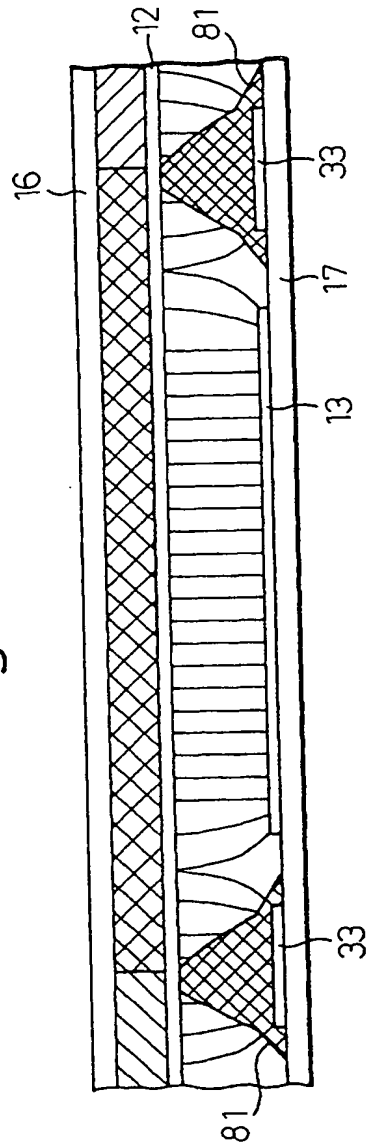
Fig.166B
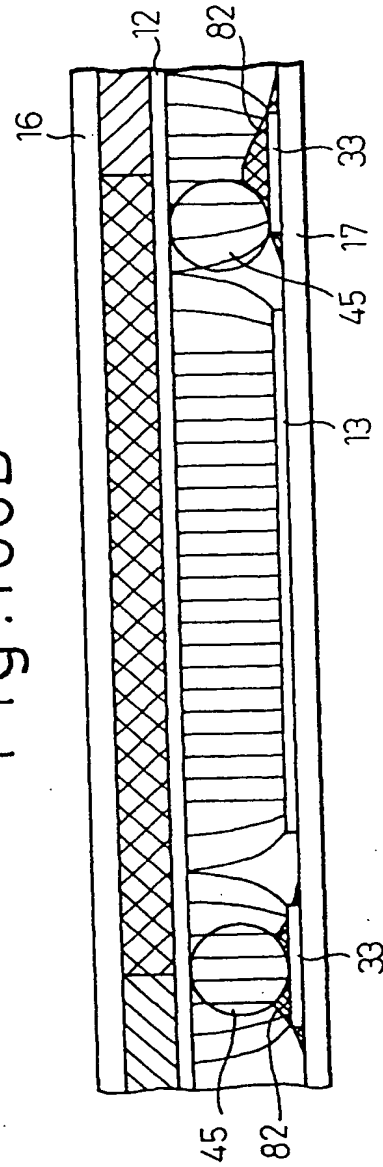
Fig.167
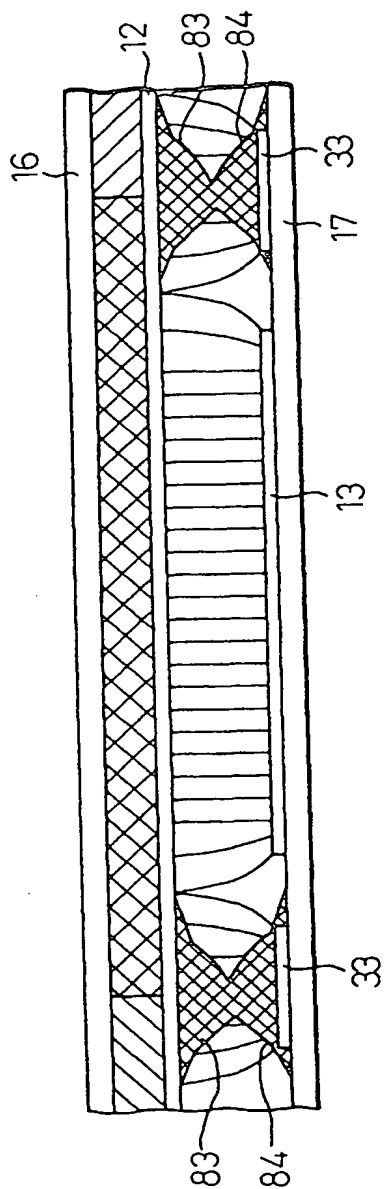
F i g .168A
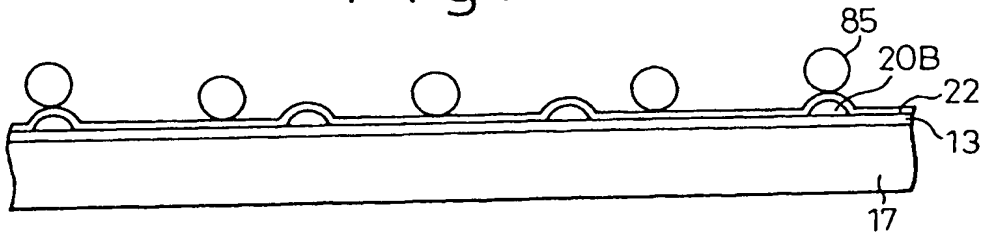
F i g .168B
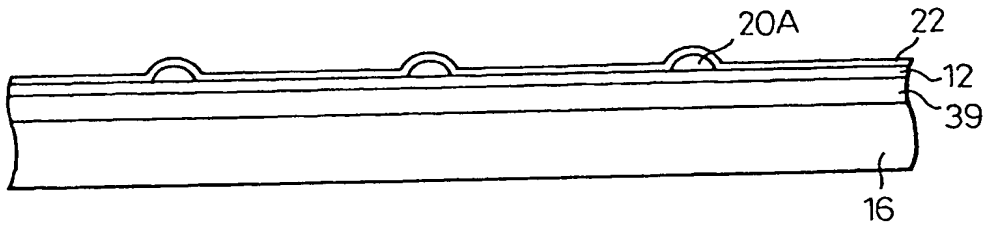
F i g .168C
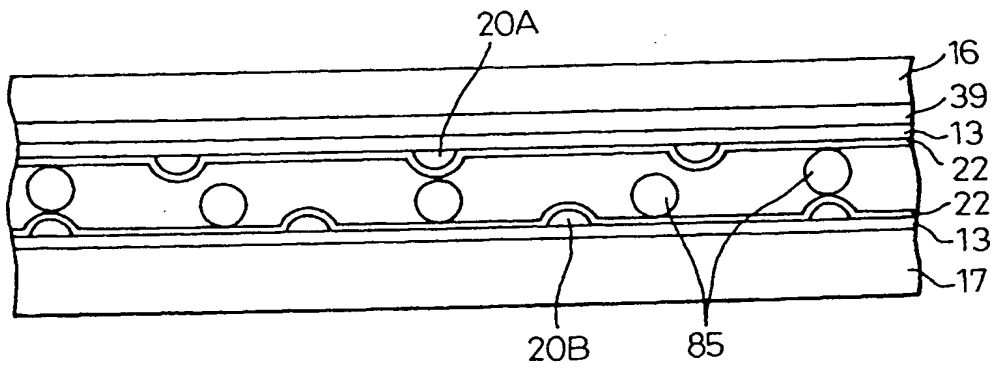
Fig.169
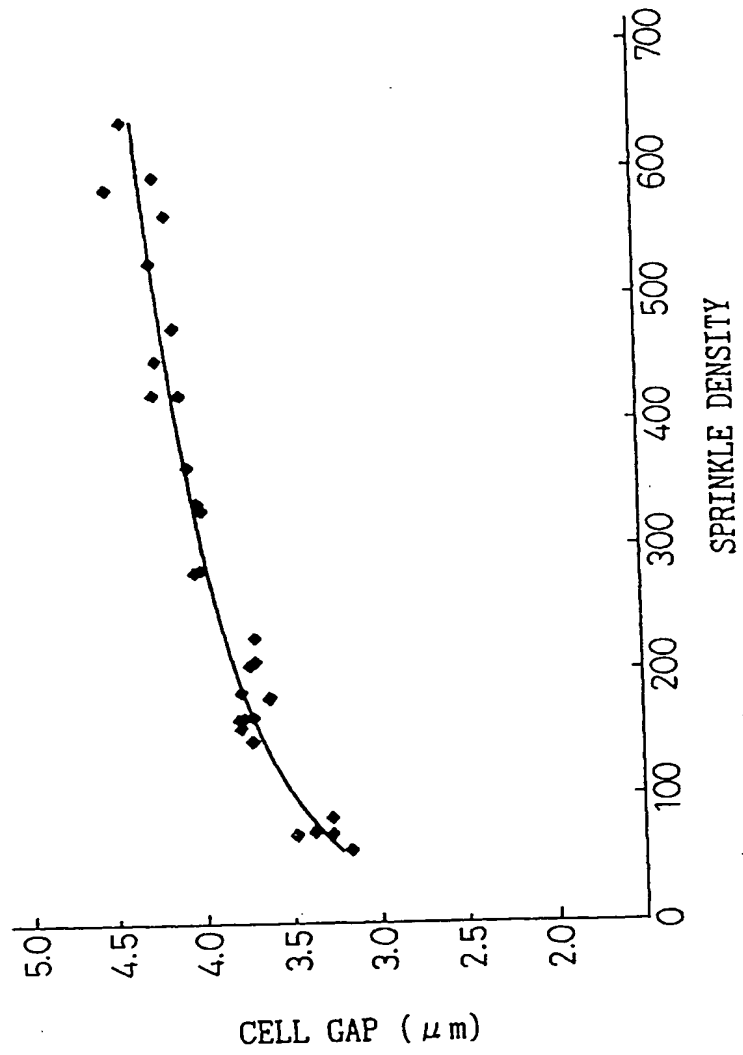
Fig.170

SPRINKLE DENSITY OF SPACERS (NUMBERS/mm²)	50	100	150	200	250	300	350	400	450	500	550
BLEMISH OCCURRENCE DUE TO PUSHING	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO
BLEMISH OCCURRENCE DUE TO PULLING	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES

Fig.171A
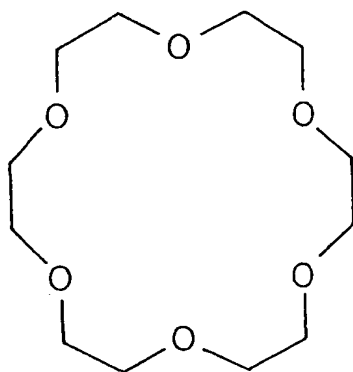
18-CROWN-6

Fig.171B
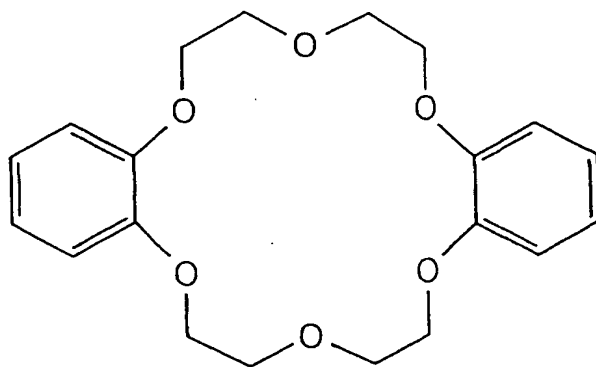
DIBENZOYL-18-CROWN-6

Fig.172A
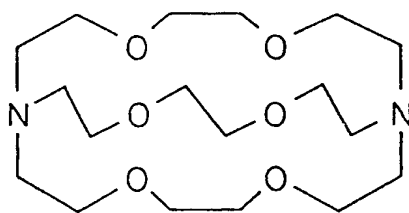
CRYPTAND [2.2.2]

Fig.172B
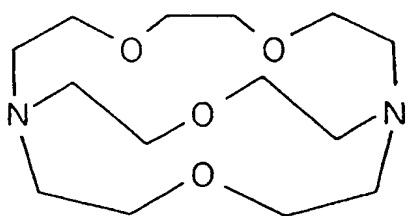
CRYPTAND [2.1.1]

Fig.173A
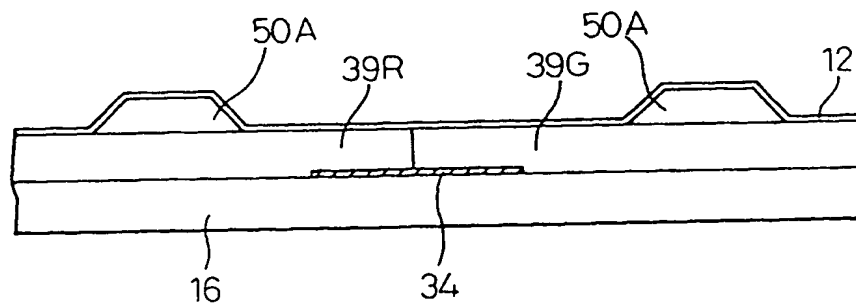
Fig.173B
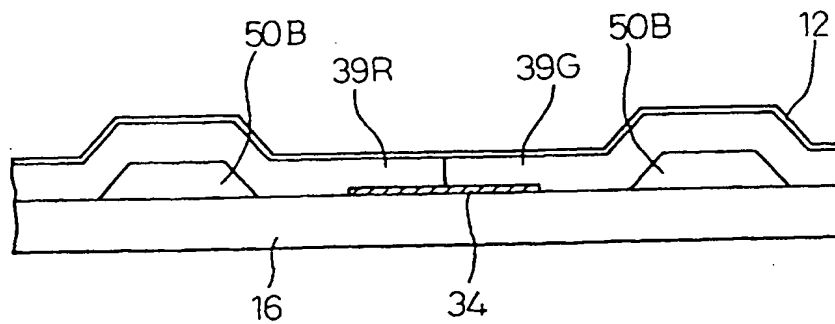
Fig.174
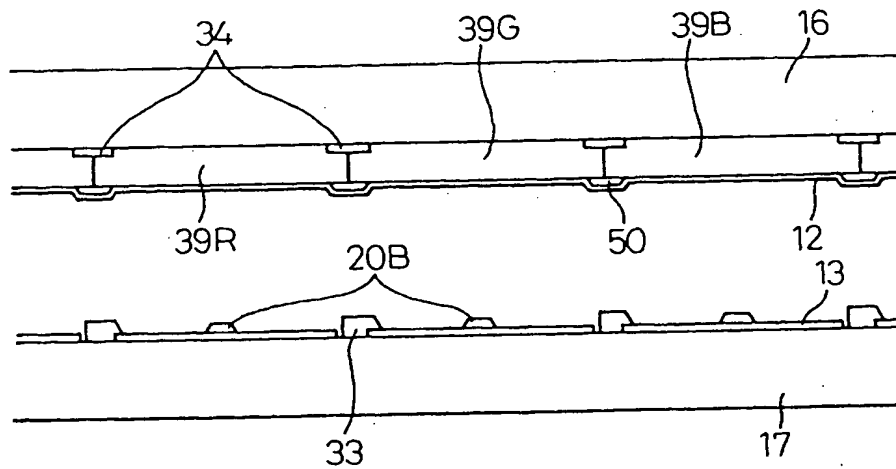
Fig.175A
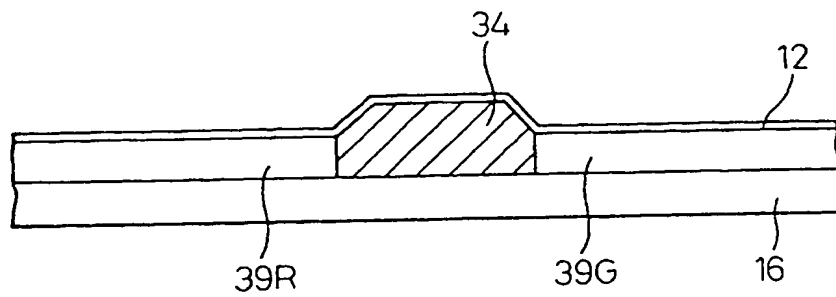
Fig.175B
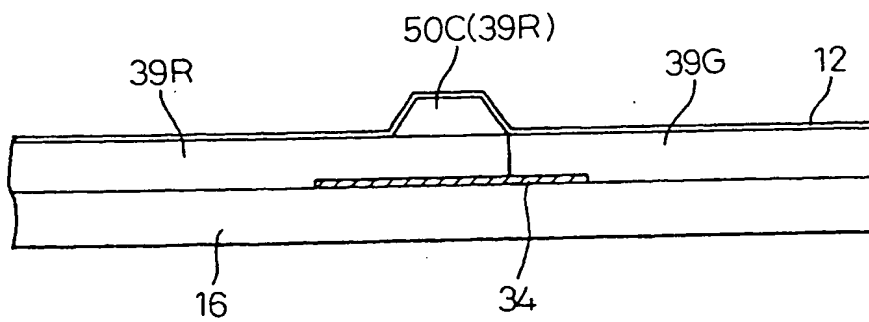
Fig.176A
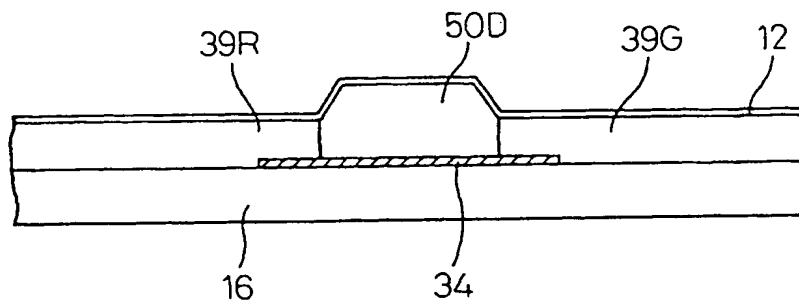
Fig.176B
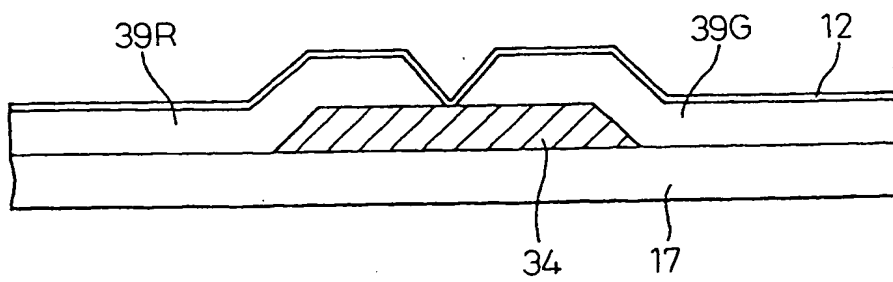
Fig.177A
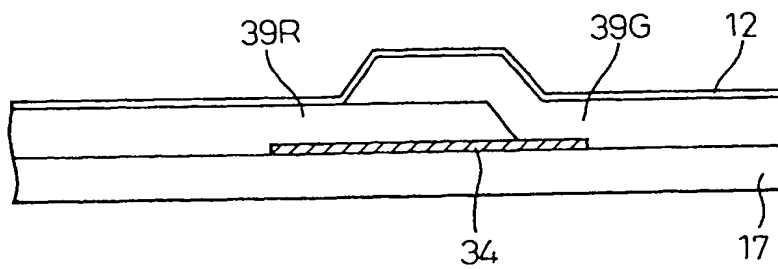
Fig.177B
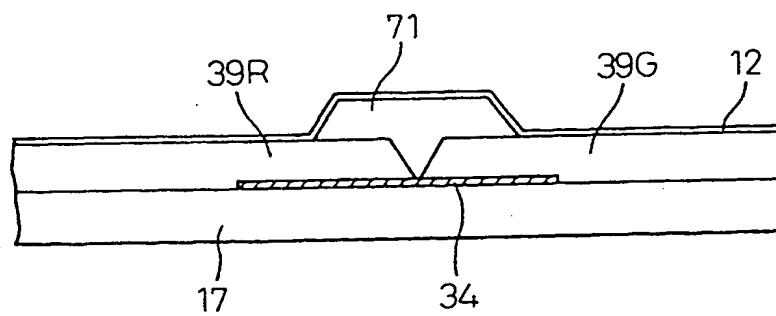
Fig.178
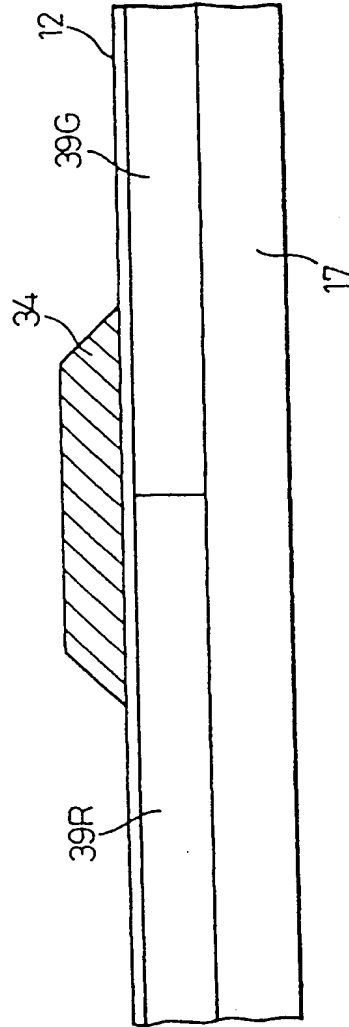
Fig.179A

39R   39G

17   34   12

Fig.179B

50E

39R   39G   12

17   34

Fig.180A

34

39R   39G

17   12

Fig.180B

34

50F   12

39R   17   34   39G

Fig.181A

16

Fig.181B

39B'

Fig.181C

370

39B'

Fig.181D

371

39R'   39B

Fig.181E

372

39G'   39R   39B

Fig.181F

39G   39R   341   39B

Fig.181G

34   20A   34   12

39G   39R   381   39B   40
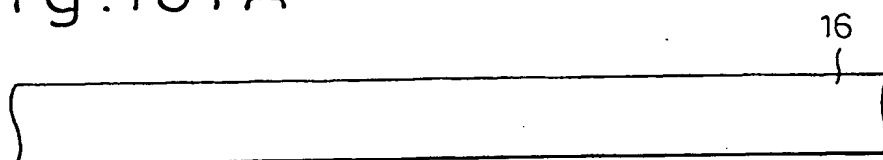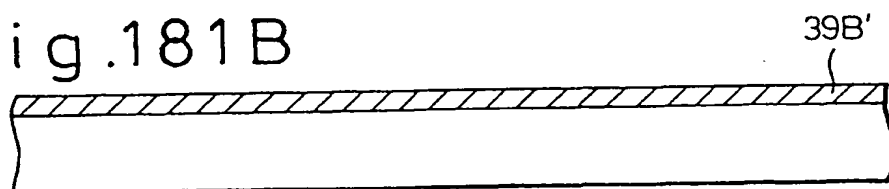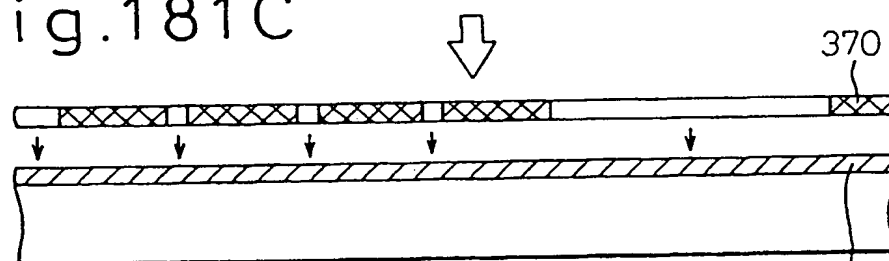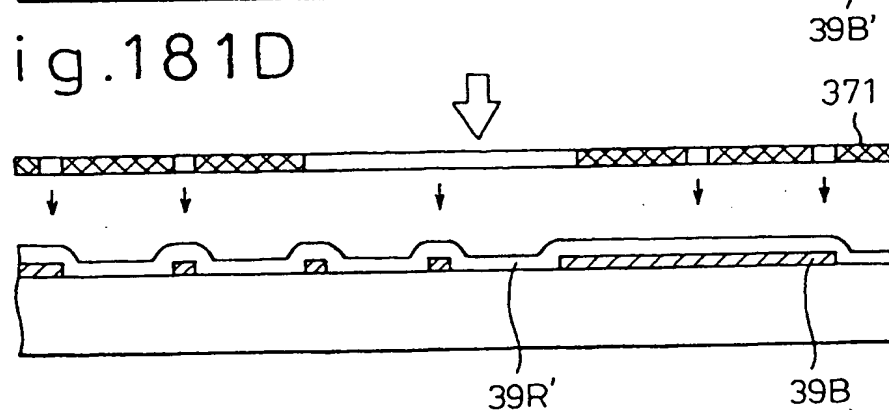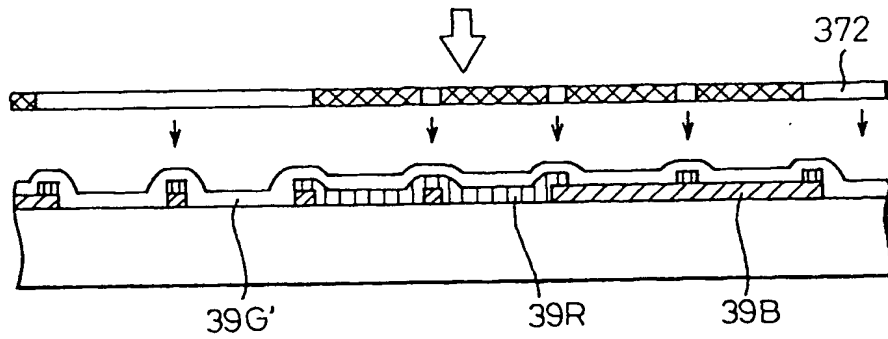
Fig.182

Fig.183A

Fig.183B
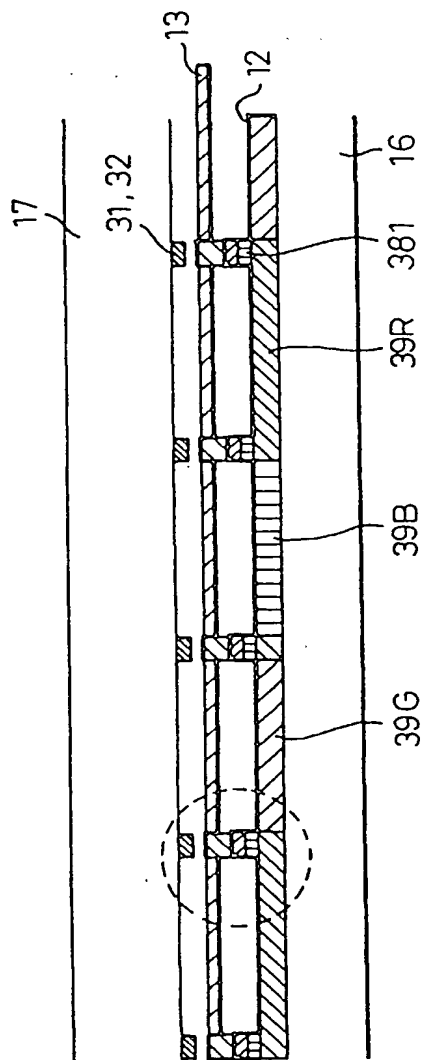
Fig.184A

Fig.184B

Fig.185A

381
39R
39B
39G
16

Fig.185B

40
16

Fig.185C

12
20A
20A
16

Fig.186

Fig.187

39B'   39R   39G

16

365nm
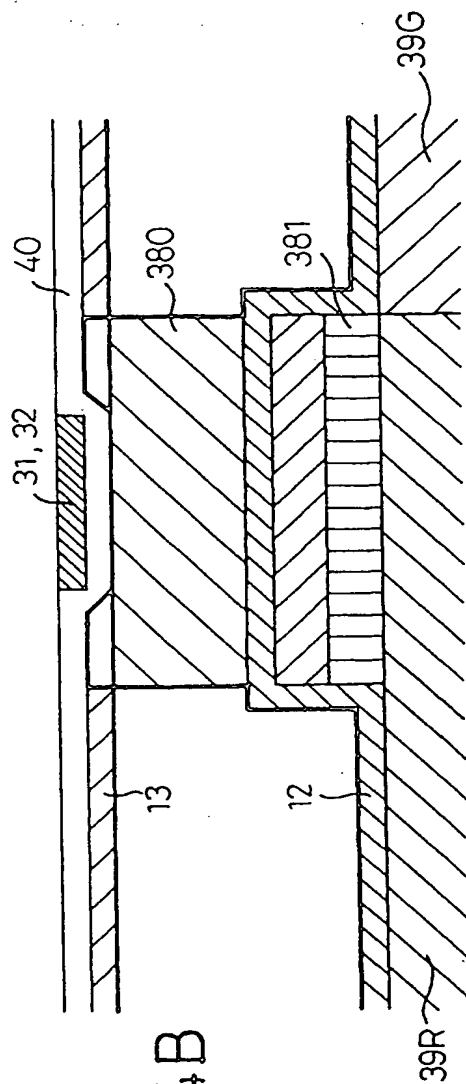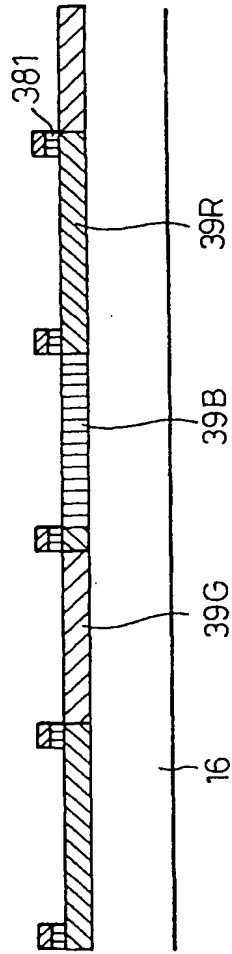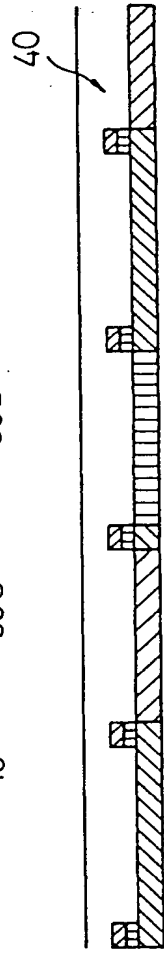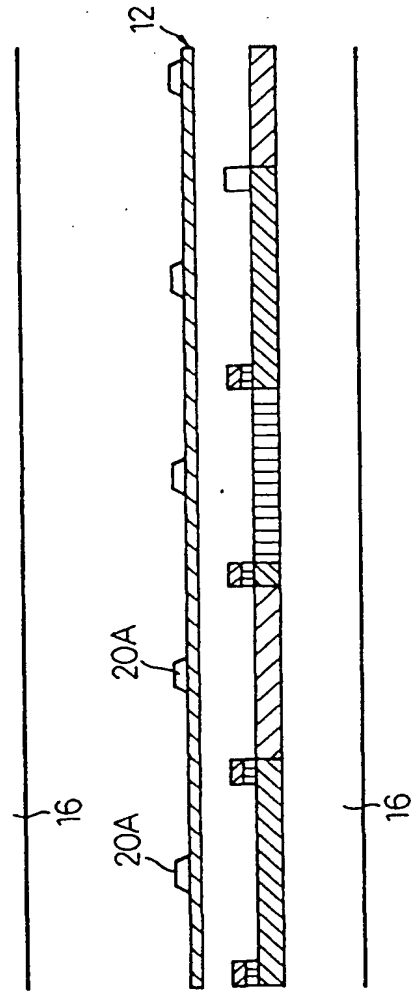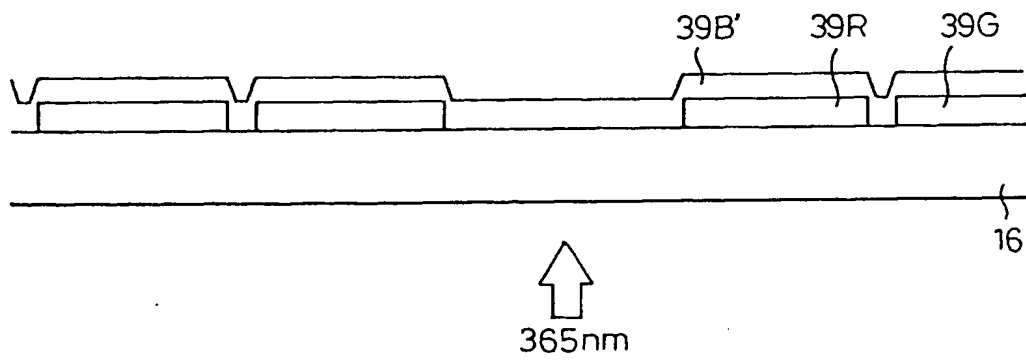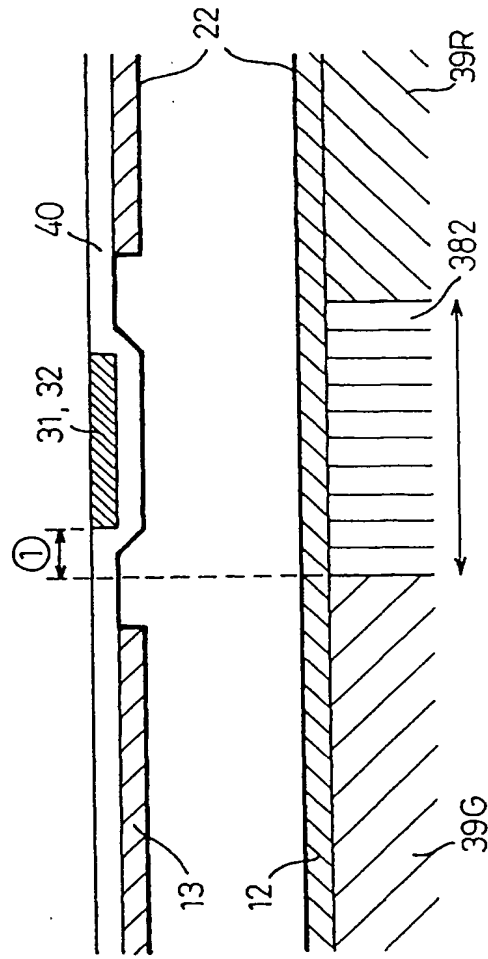
Fig.188A

Fig.188B
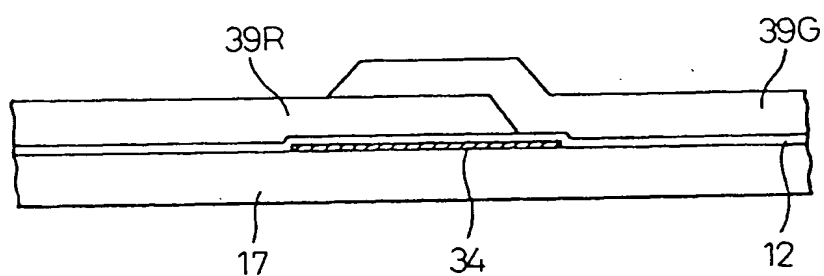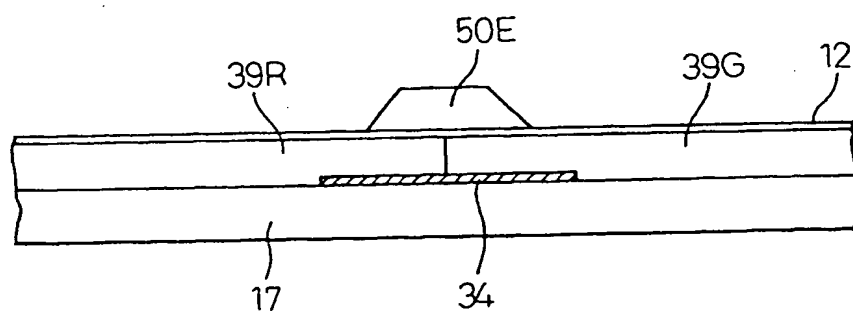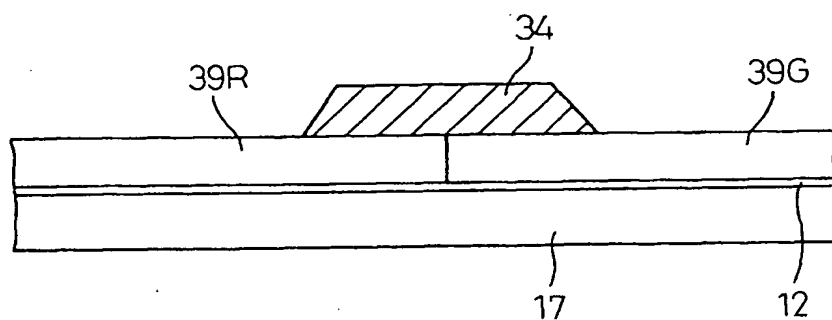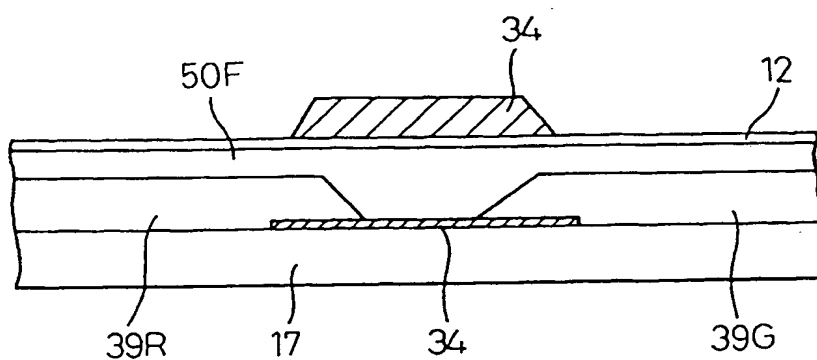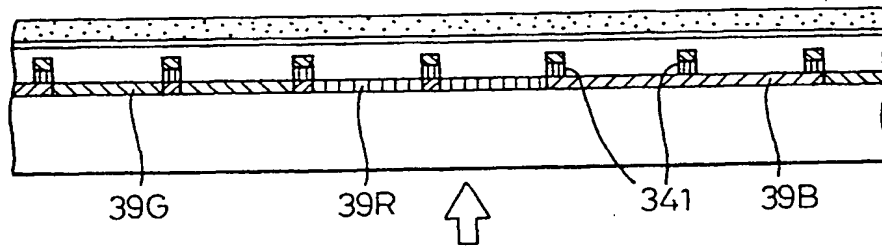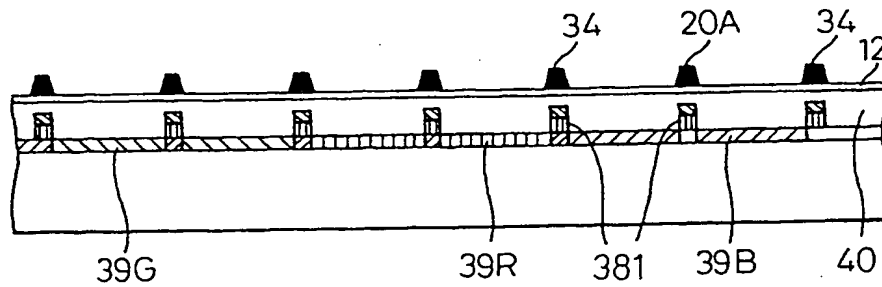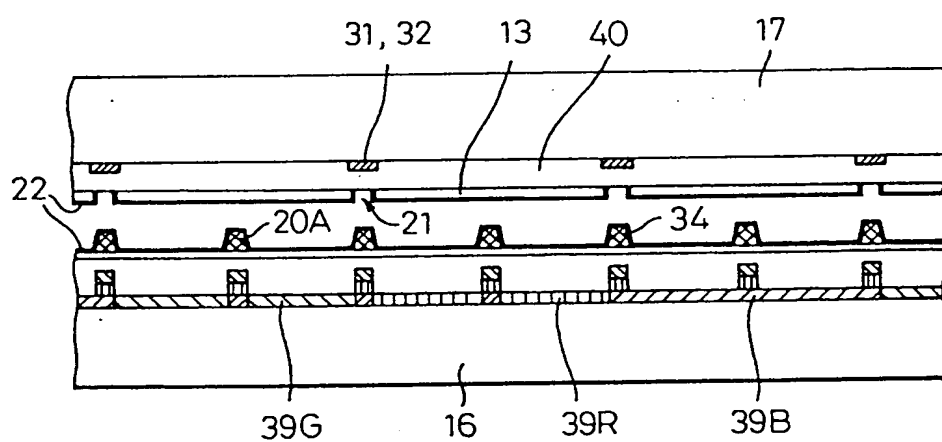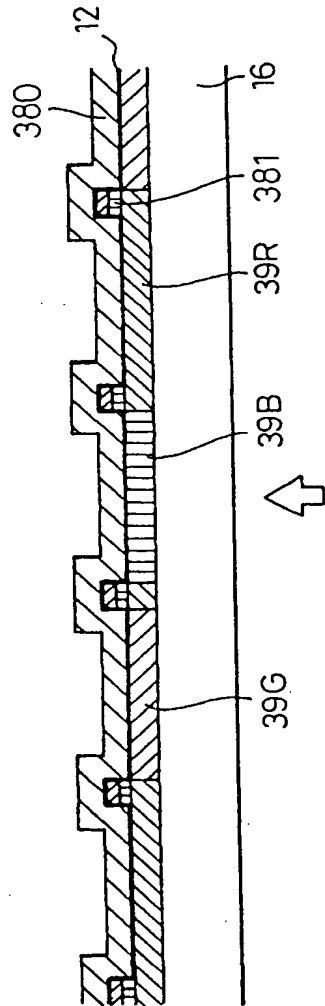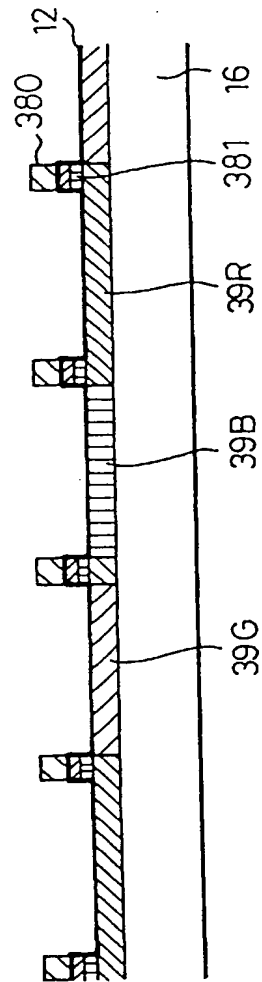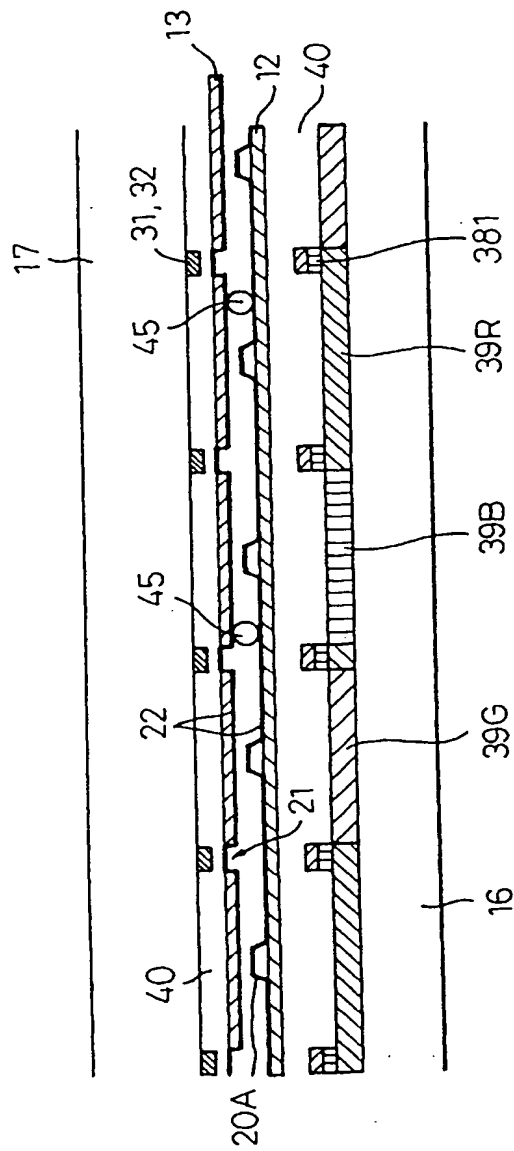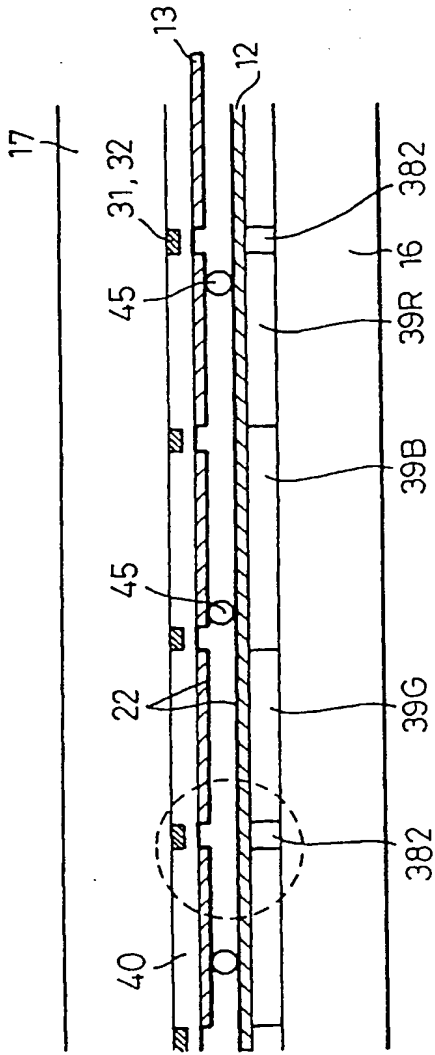
Fig.189
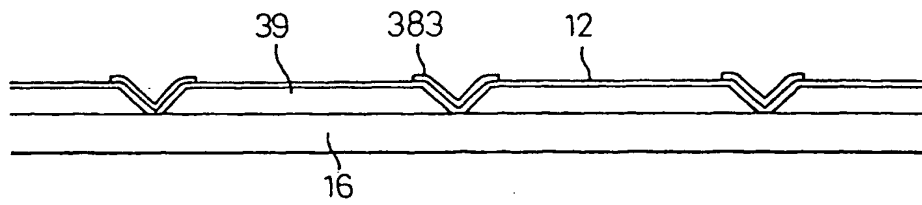
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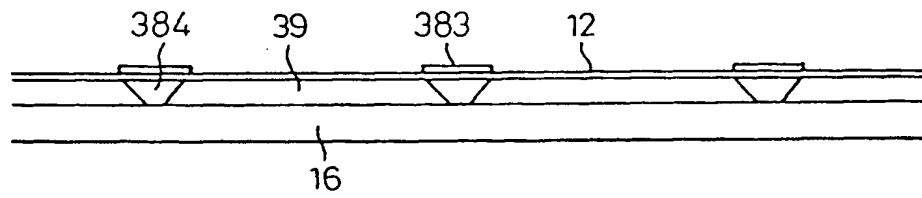
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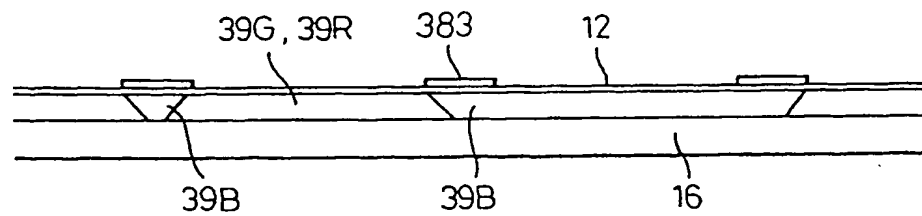
Fig.191

Fig.192

Fig.193

Fig.194

110

Fig.195

114

113

111

100

112

Fig.196A

ROTATION

20

20

Fig.196B

ROTATION

20

20

Fig.197

```
┌─────────────────────────────┐
│   SUBSTRATE CLEANING STEP   │─501
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│      GATE ELECTRODES         │
│      FORMING STEP            │─502
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│     OPERATIONAL LAYER        │
│     FORMING STEP             │─503
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│    ELEMENT DIVIDING STEP     │─504
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│    OVERCOAT FORMING STEP     │─505
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│     PIXEL ELECTRODE          │
│     FORMING STEP             │─506
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│   PROJECTION FORMING STEP    │─507
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│       ASSEMBLY STEP          │─508
└─────────────────────────────┘
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Fig.198

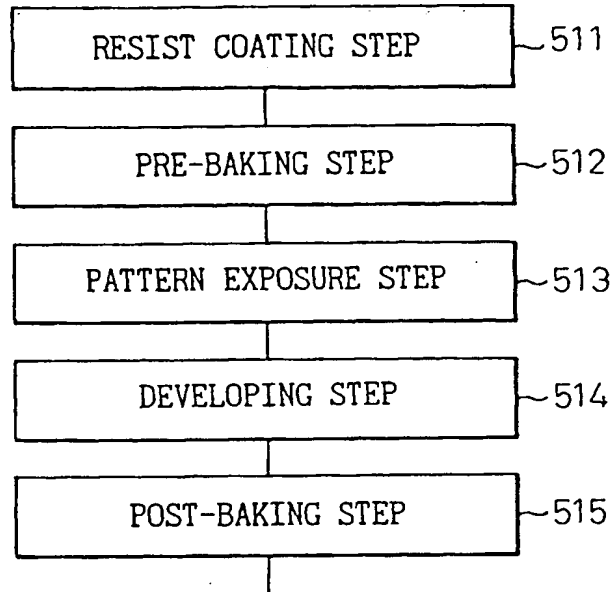|	
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PRE-BAKING STEP	~512
PATTERN EXPOSURE STEP	~513
DEVELOPING STEP	~514
POST-BAKING STEP	~515
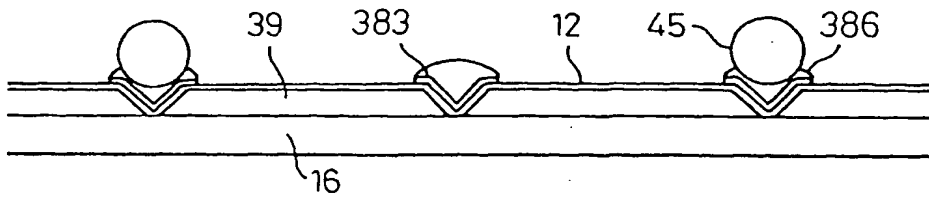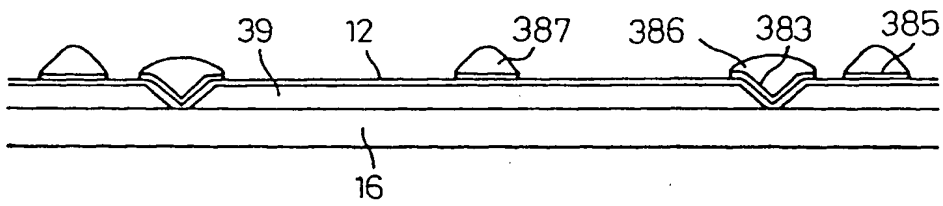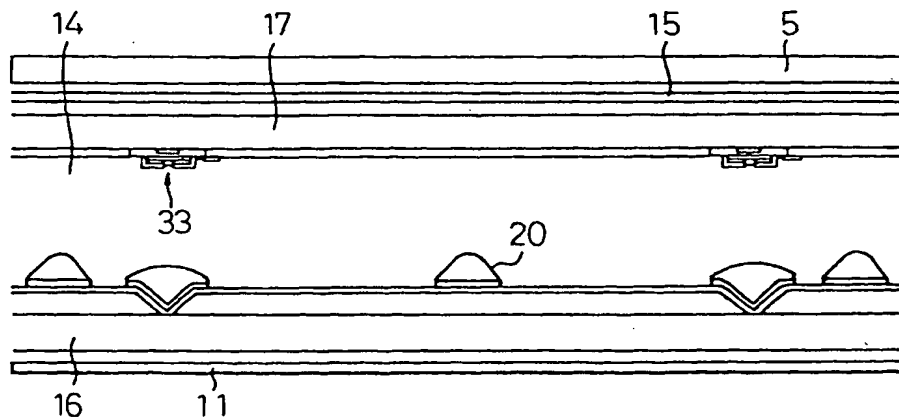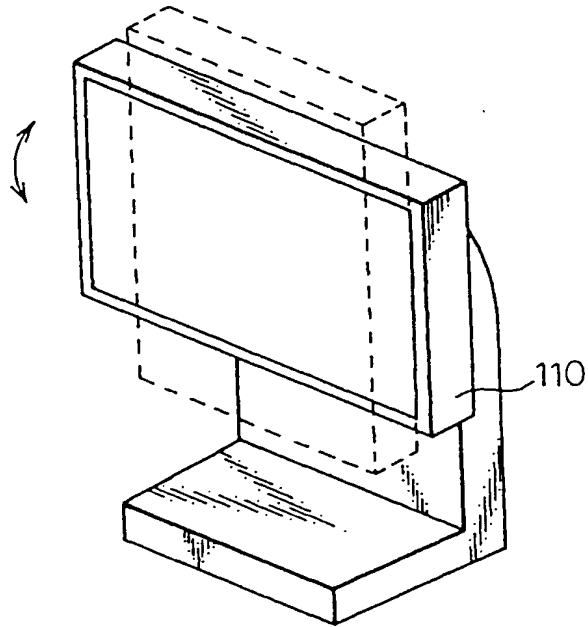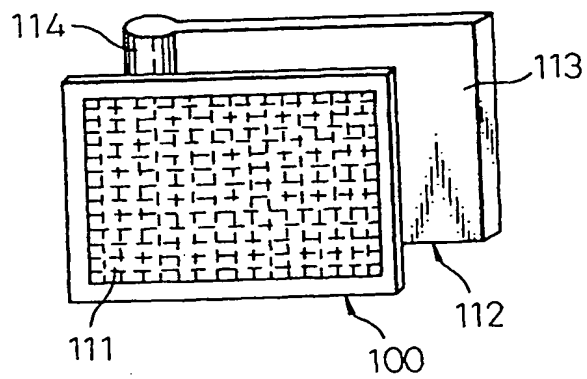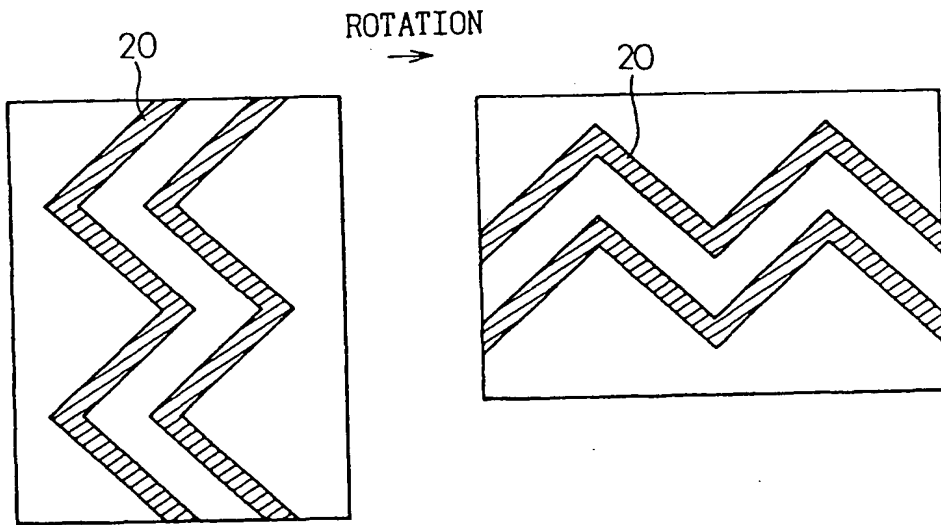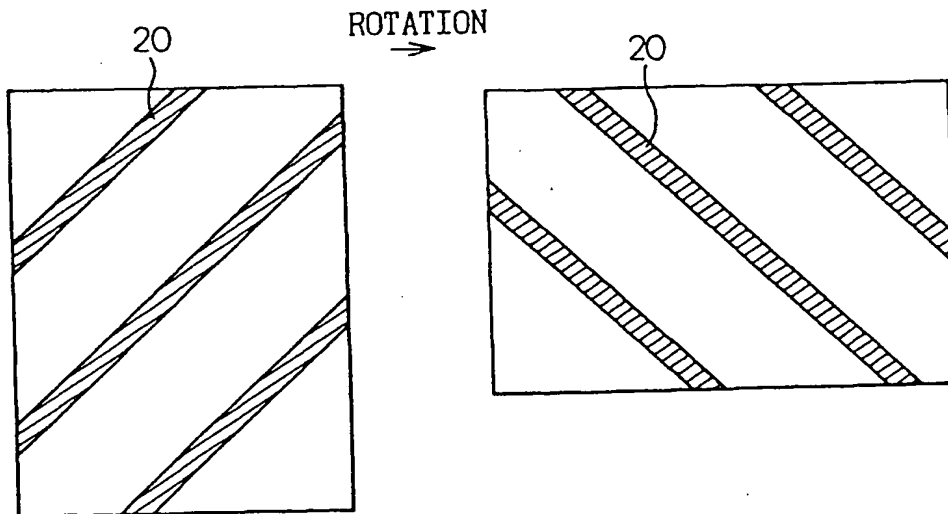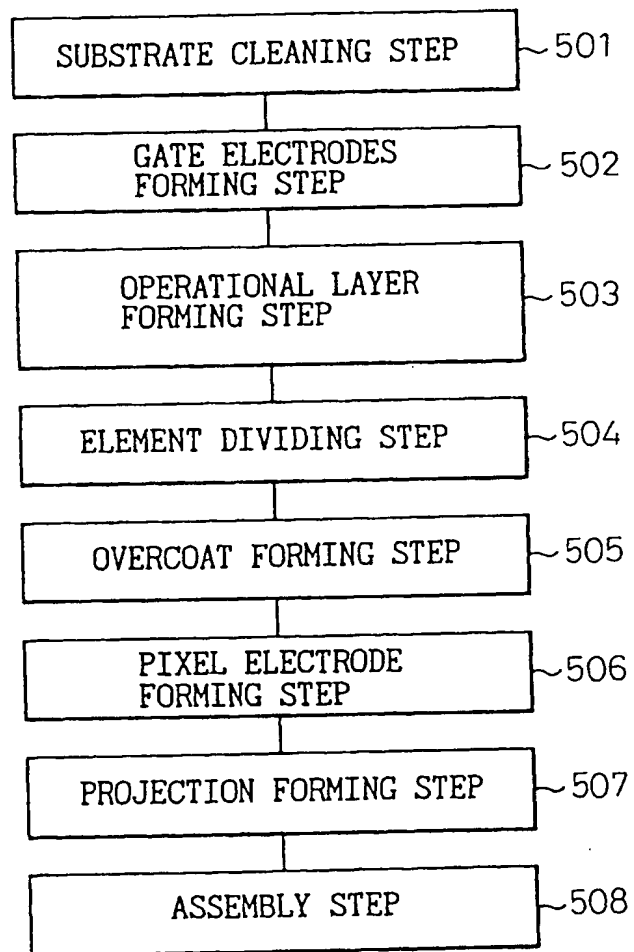
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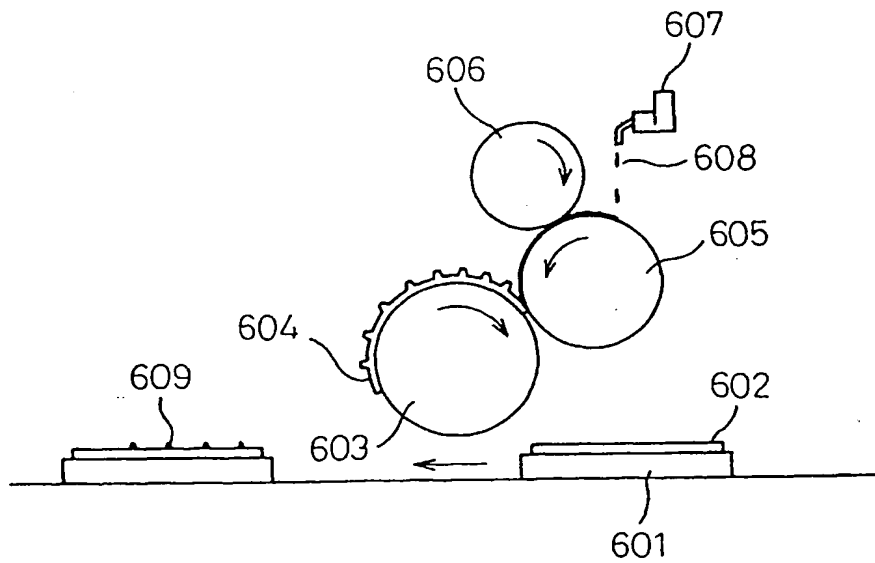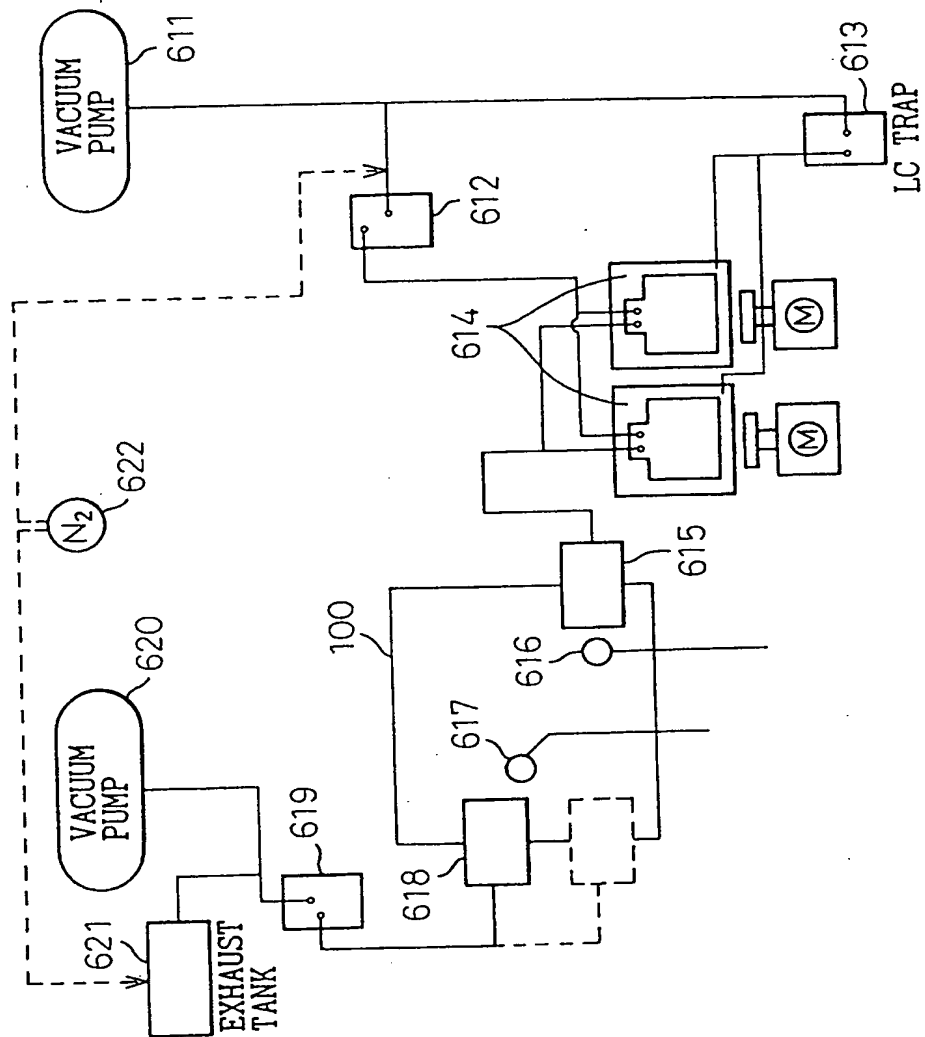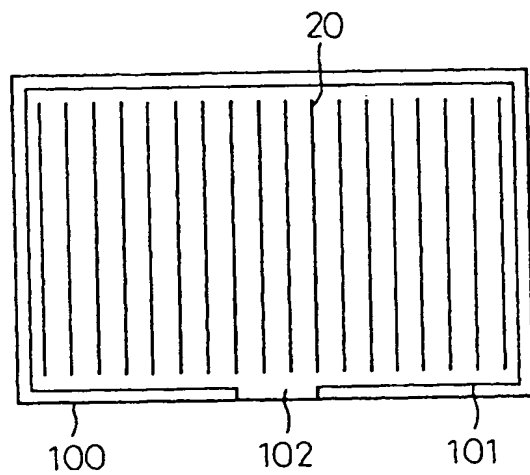
Fig.200

Fig.201A

Fig.201B
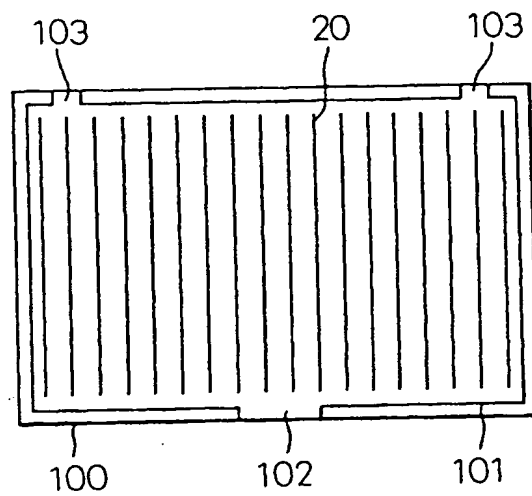
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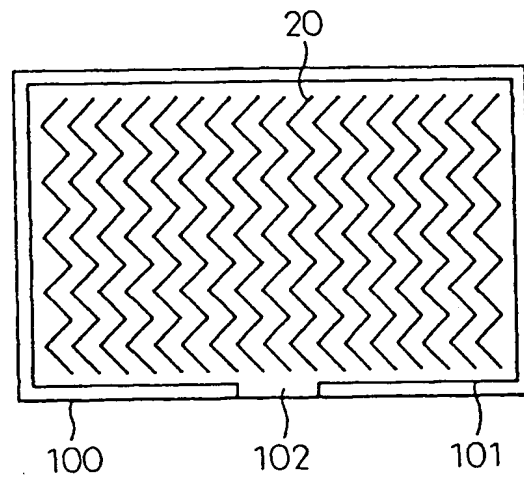
Fig.202B

Fig.203A

Fig.203B

Fig.204

DISPLAY AREA ——121

BLACK MATRIX ——34

ELECTRODE ——120

101
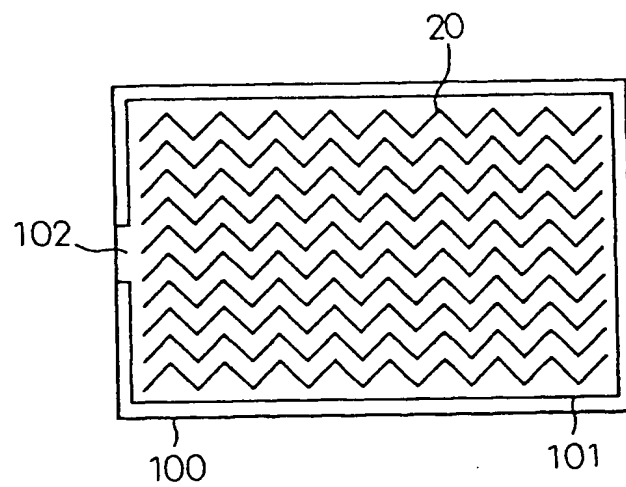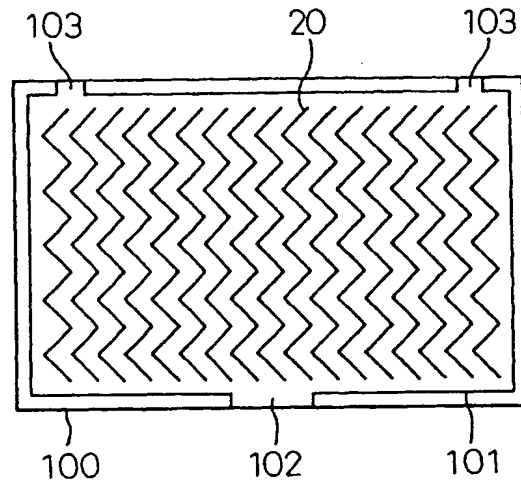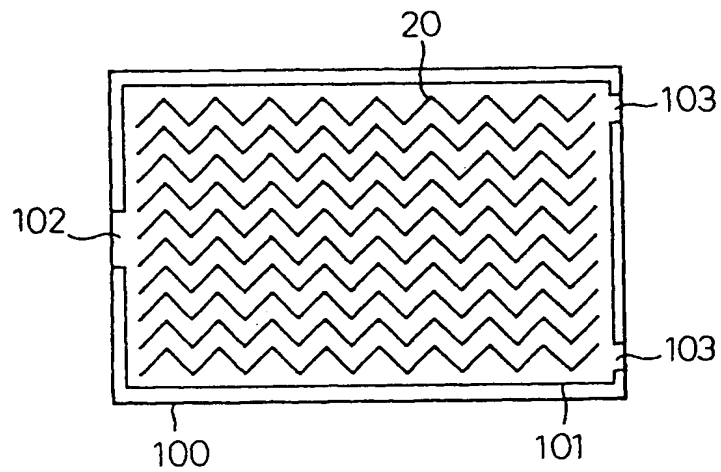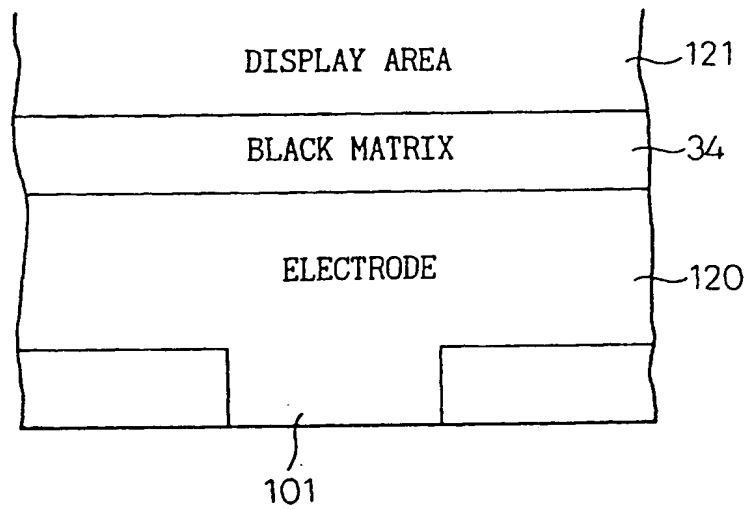
Fig.205A

Fig.205B

Fig.205C

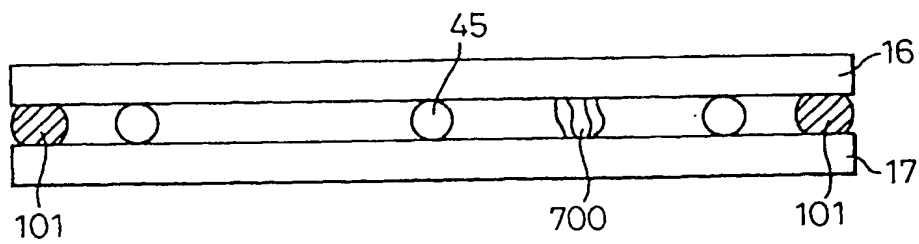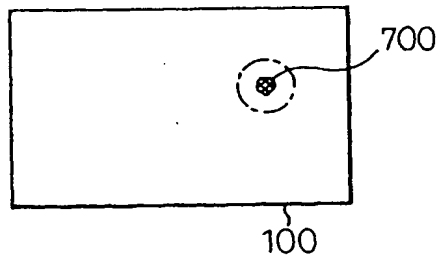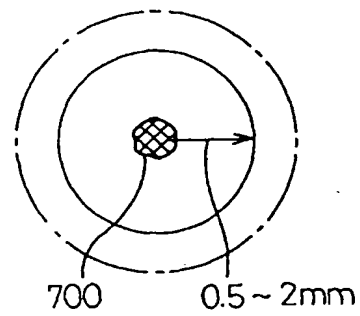# Fig.206

Fig.207

Fig. 208

Fig.209

DISCHARGE OF CHARGES (THEORETICAL VALUE)
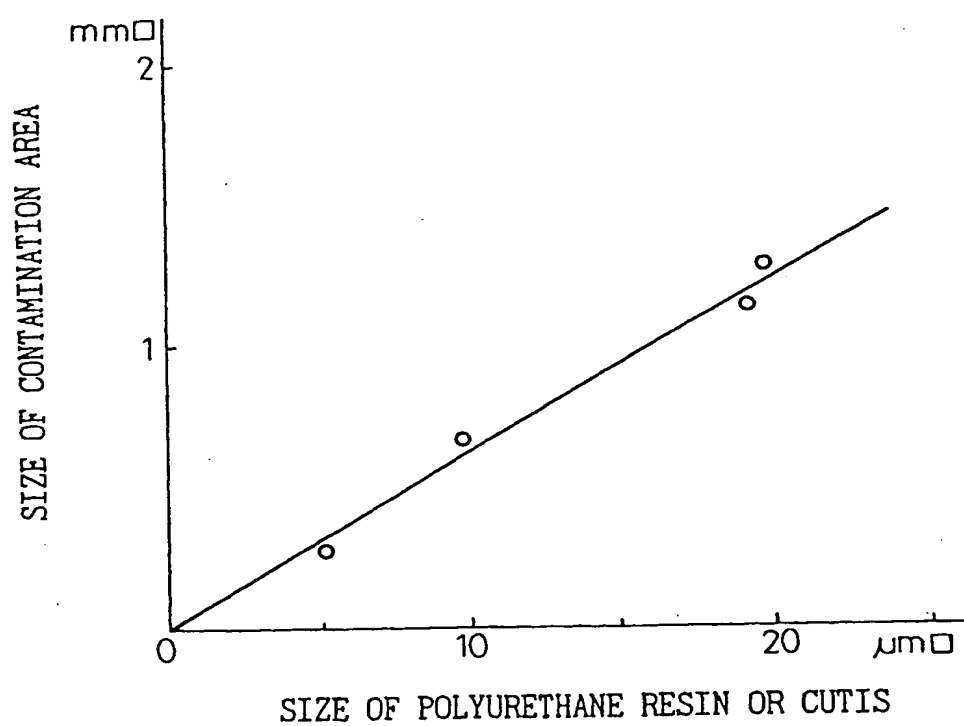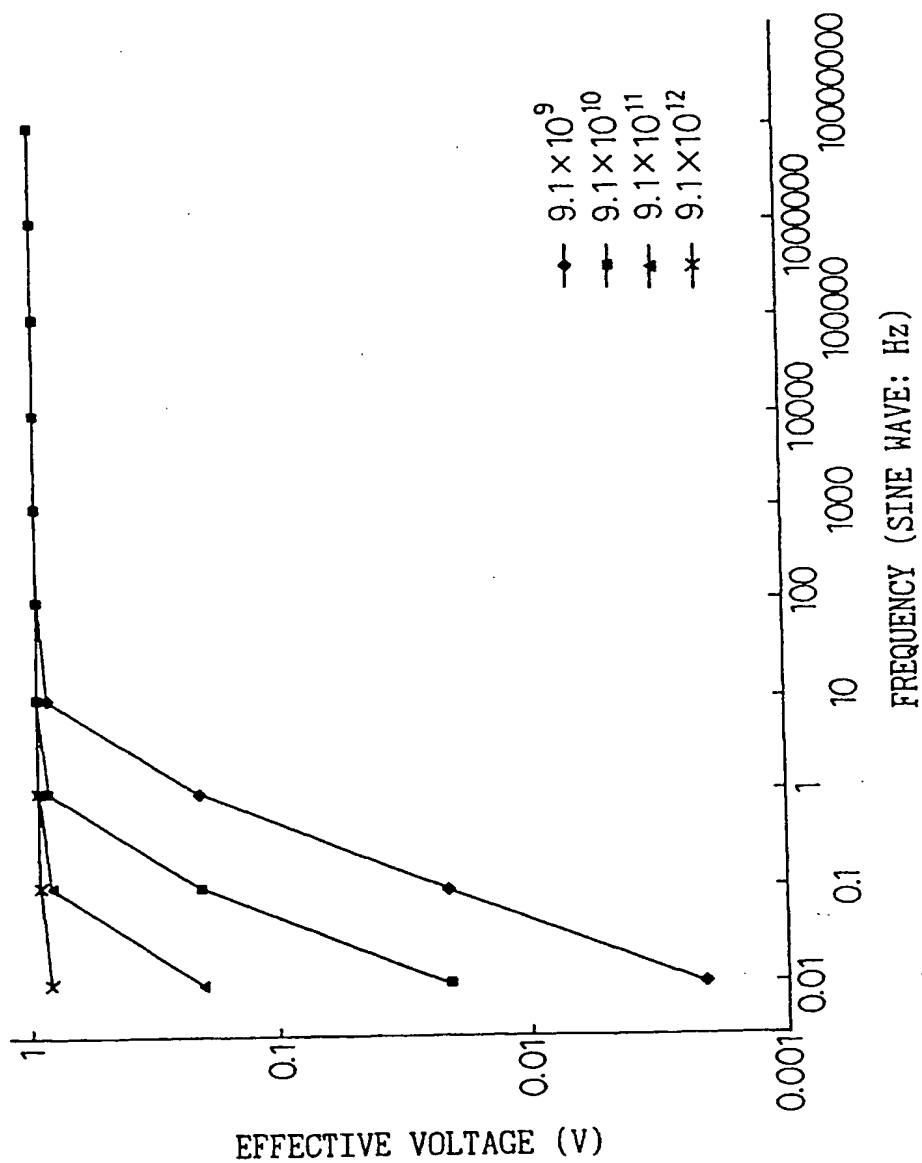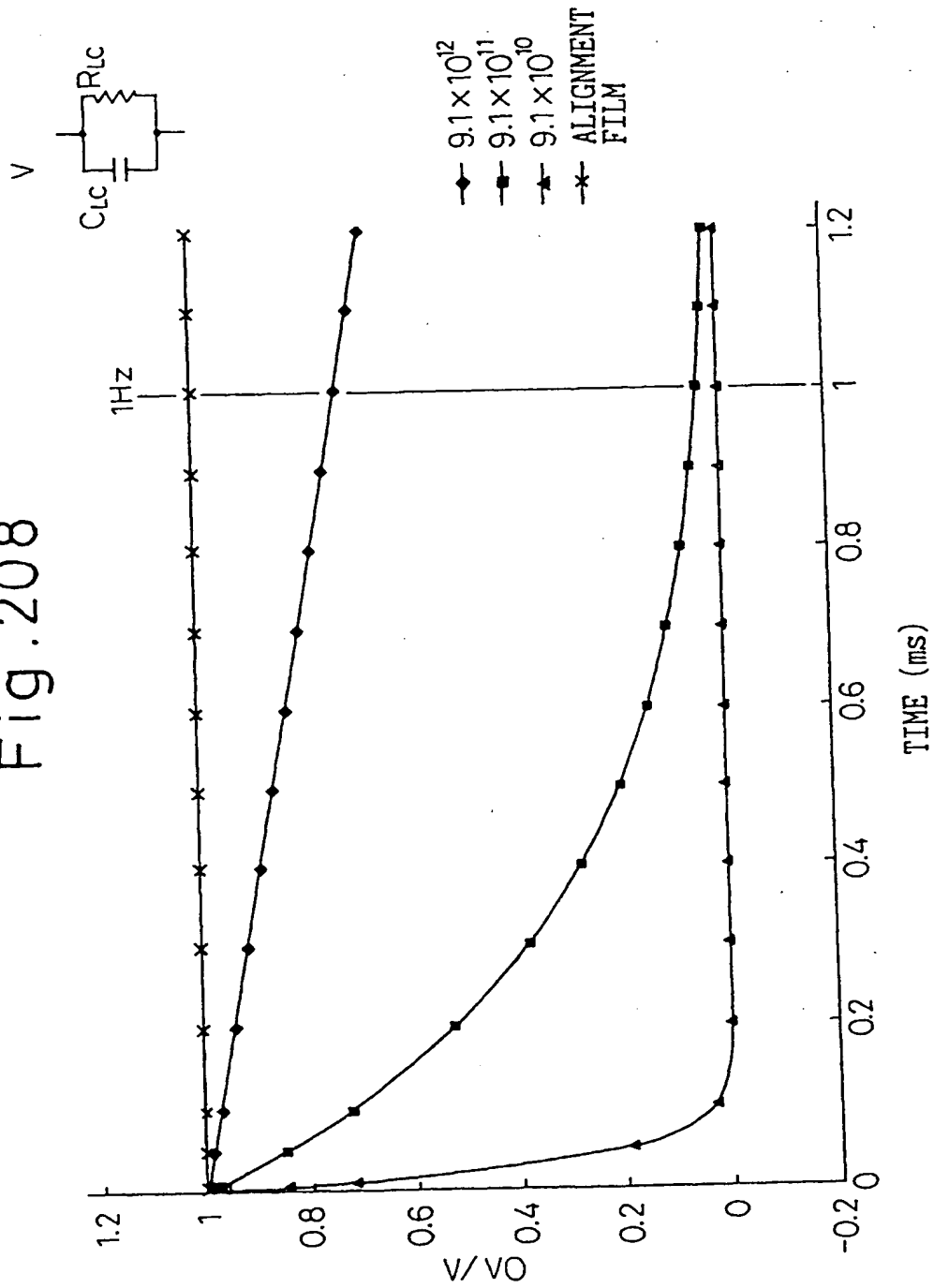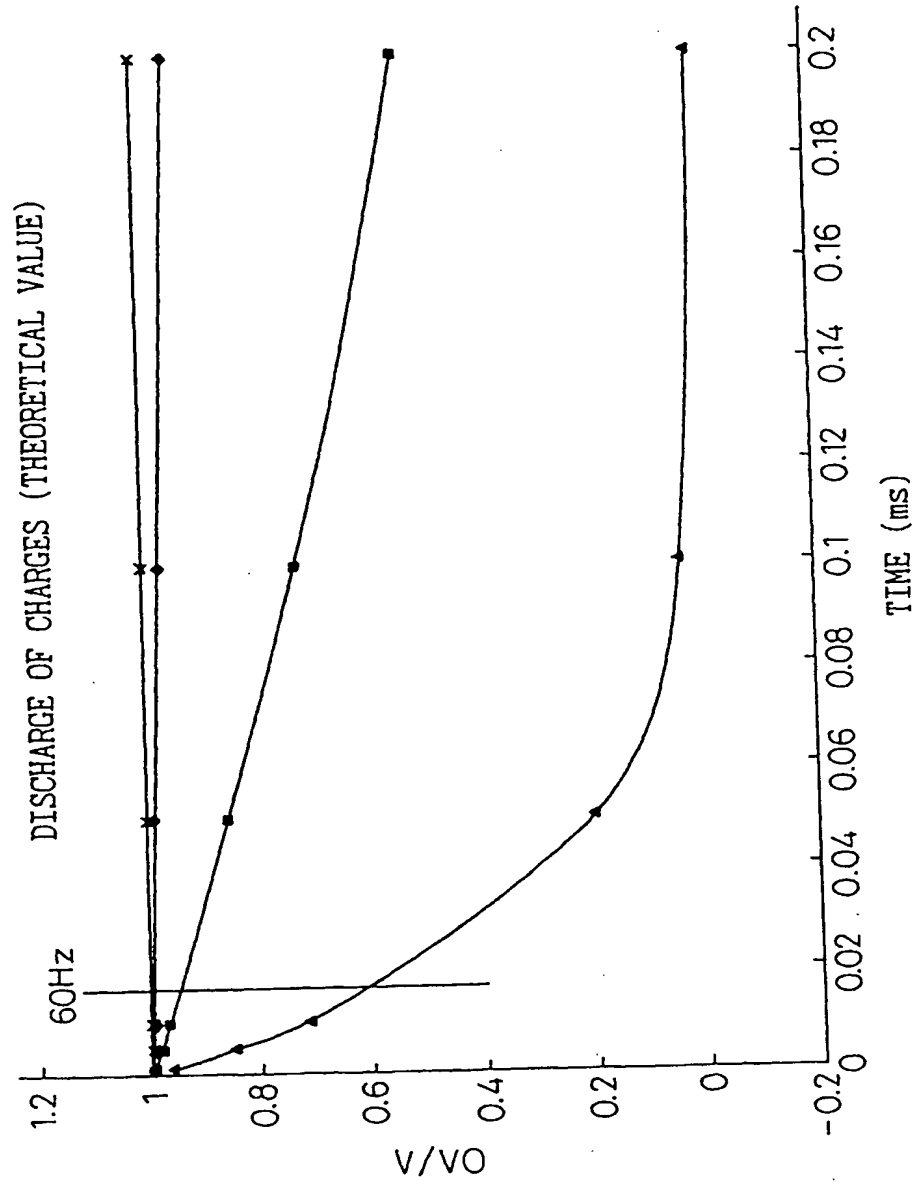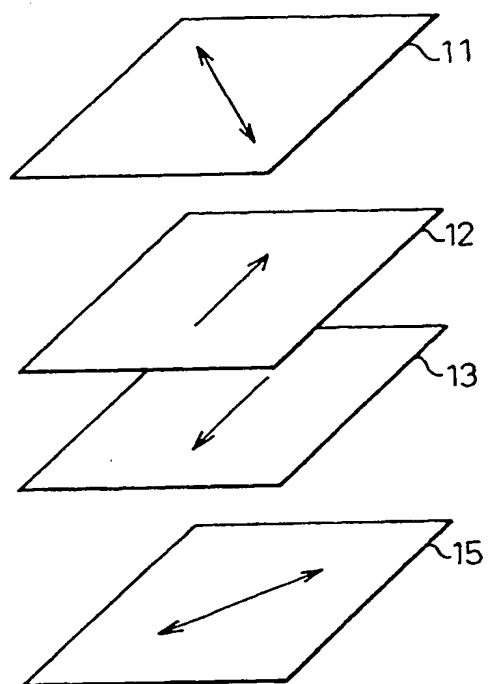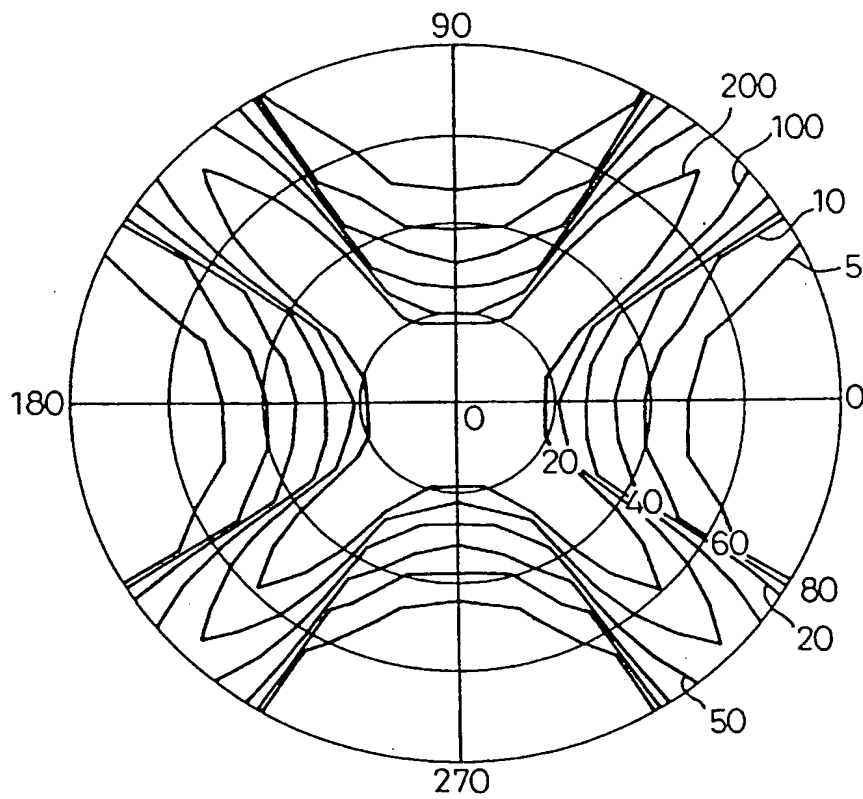
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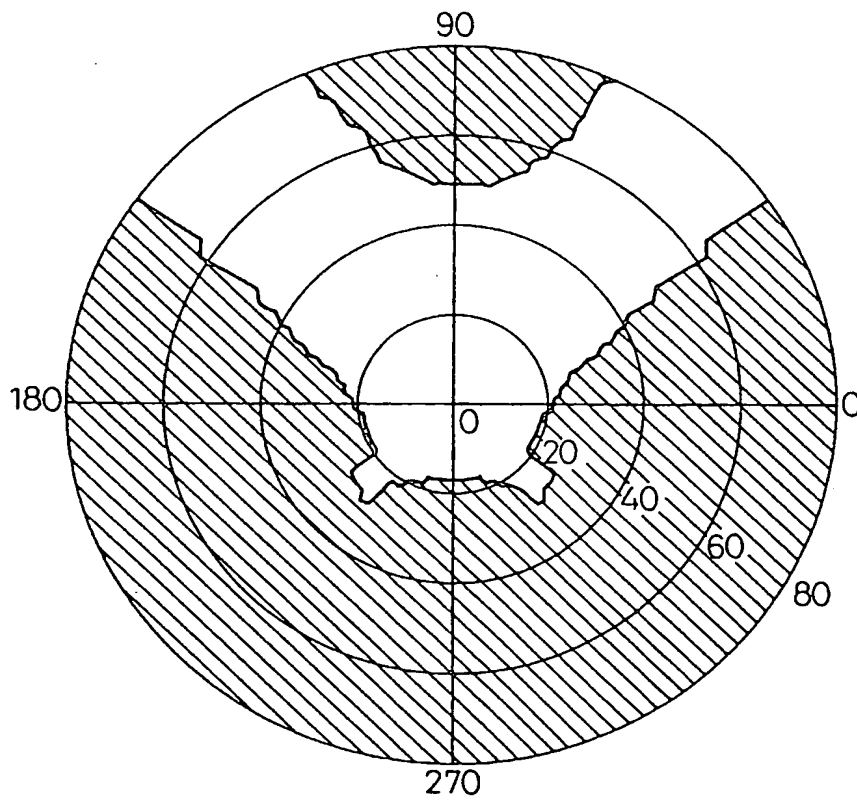
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Fig .212
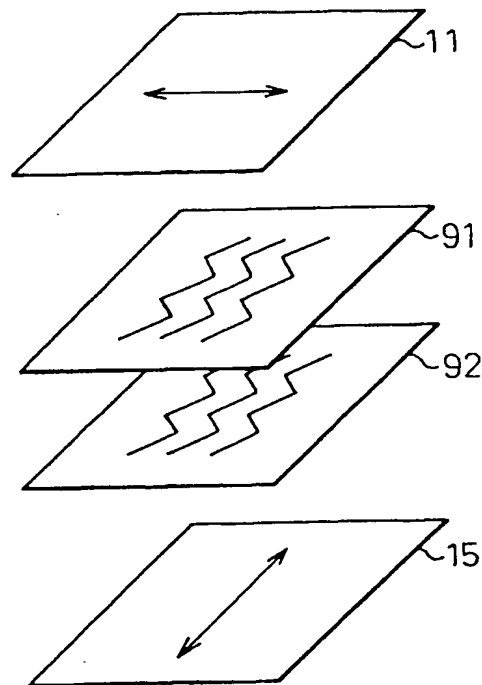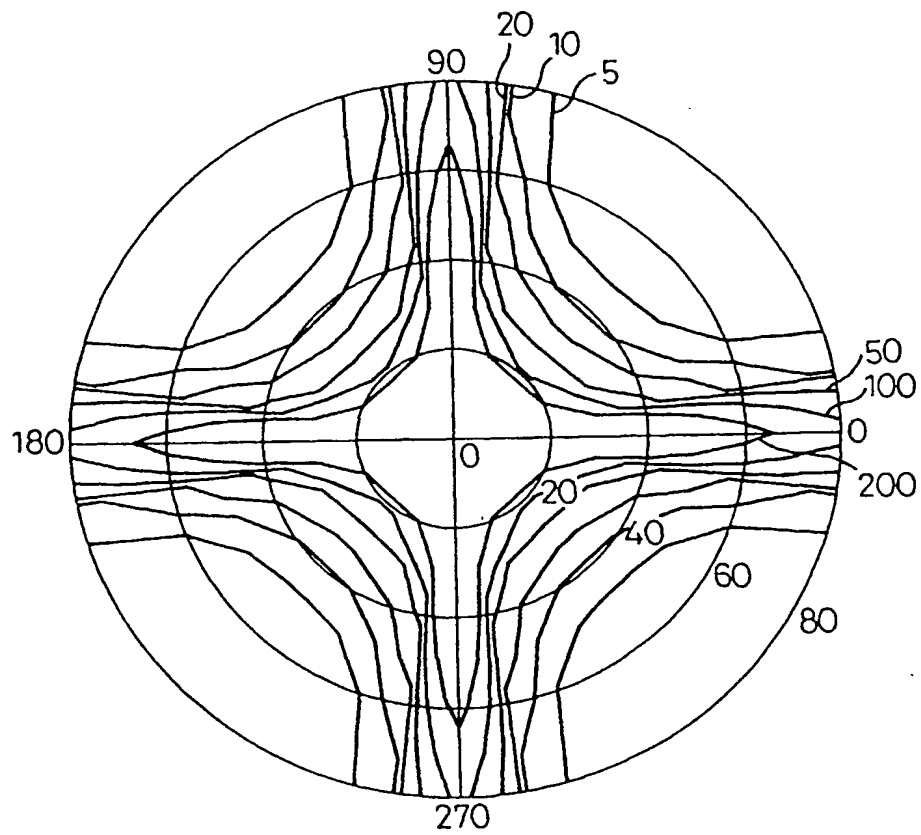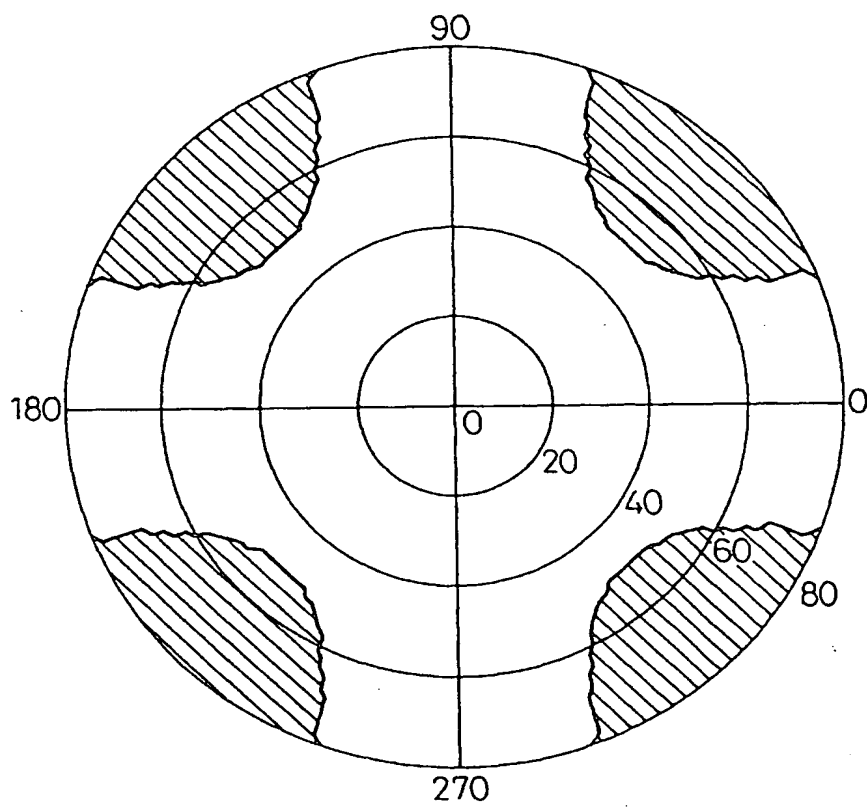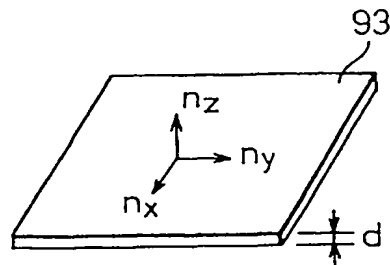
Fig.213

Fig.214

Fig.215

Fig.216

GENERAL CONDITION $\qquad n_x,\ n_y \geq n_z$

POSITIVE UNIAXIAL FILM $\qquad n_x > n_y = n_z$

NEGATIVE UNIAXIAL FILM $\qquad n_x = n_y > n_z$

BIAXIAL FILM
(A PHASE LAG AXIS IS X DIRECTION.) $\qquad n_x > n_y > n_z$

RETARDATION IN
INPLANE DIRECTIONS $\qquad R = (n_x - n_y)d$

RETARDATION OF
THICKNESS DIRECTION $\qquad R = \left(\dfrac{n_x + n_y}{2} - n_z \right)d$
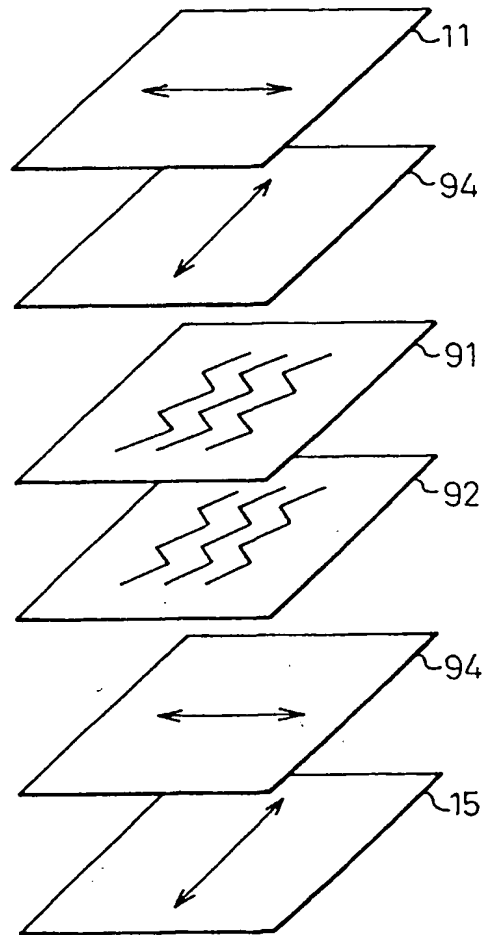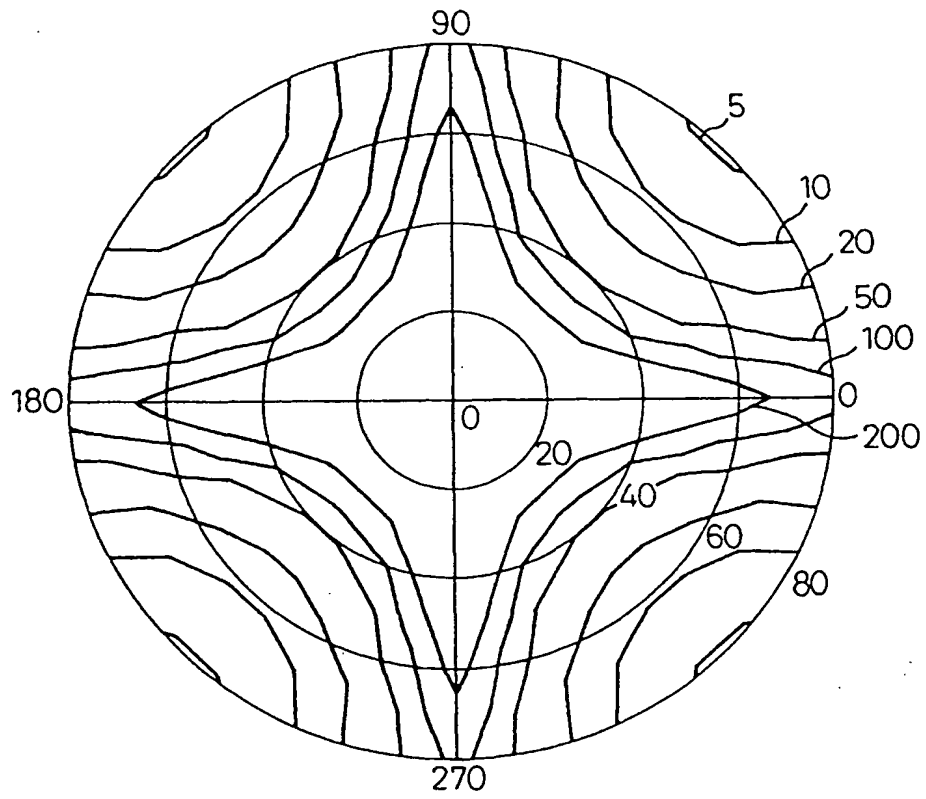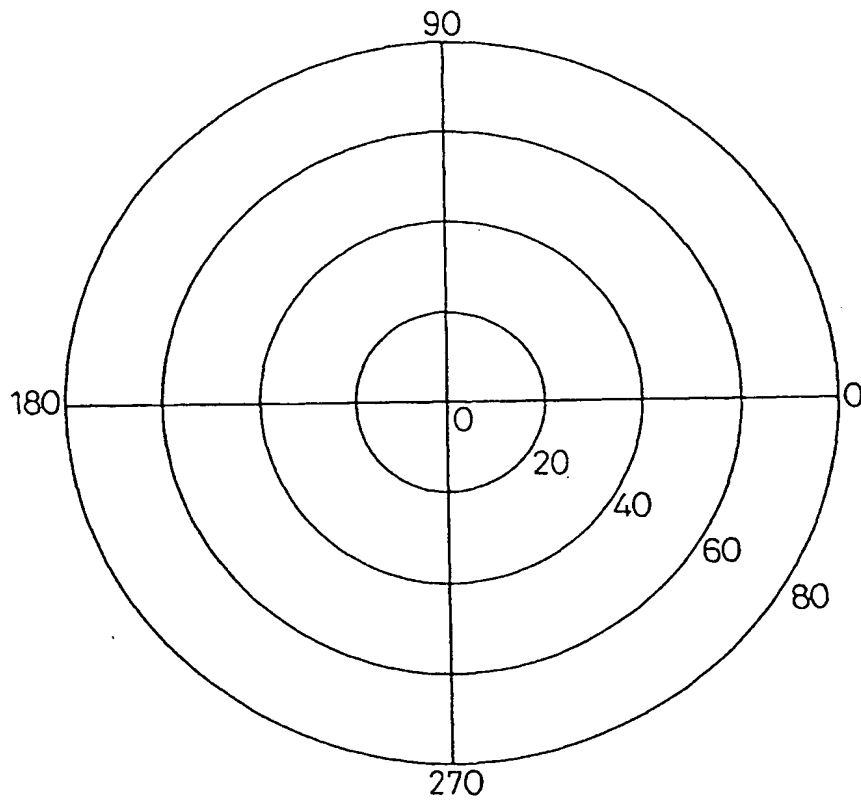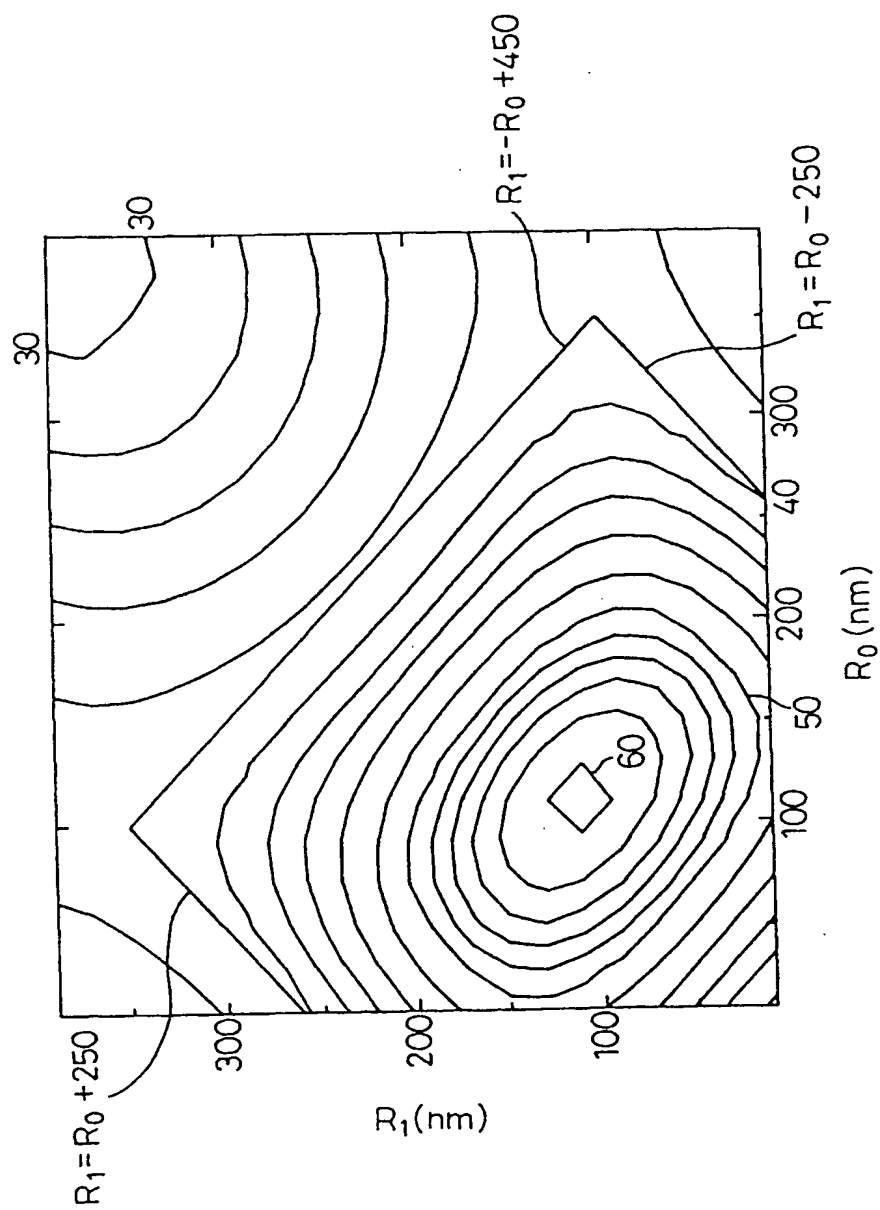
Fig.217

Fig.218

Fig.219

Fig.220

Fig. 221
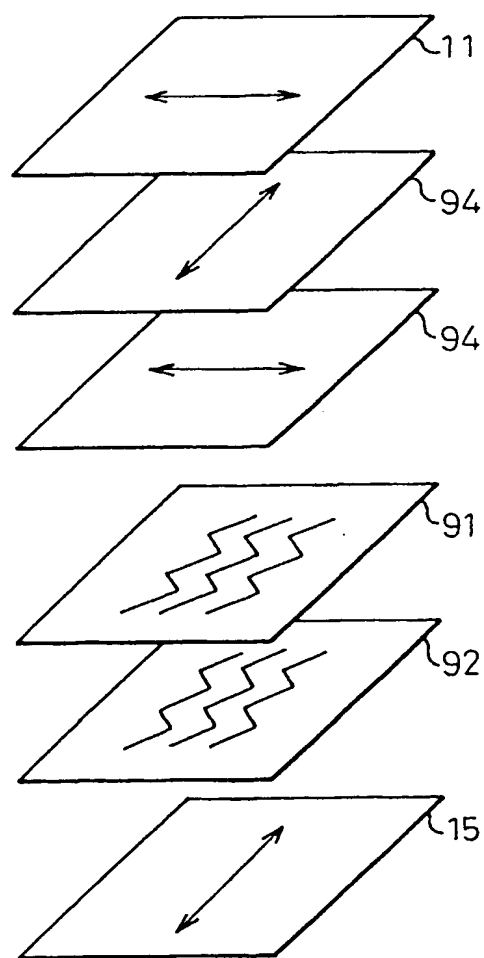
Fig . 222
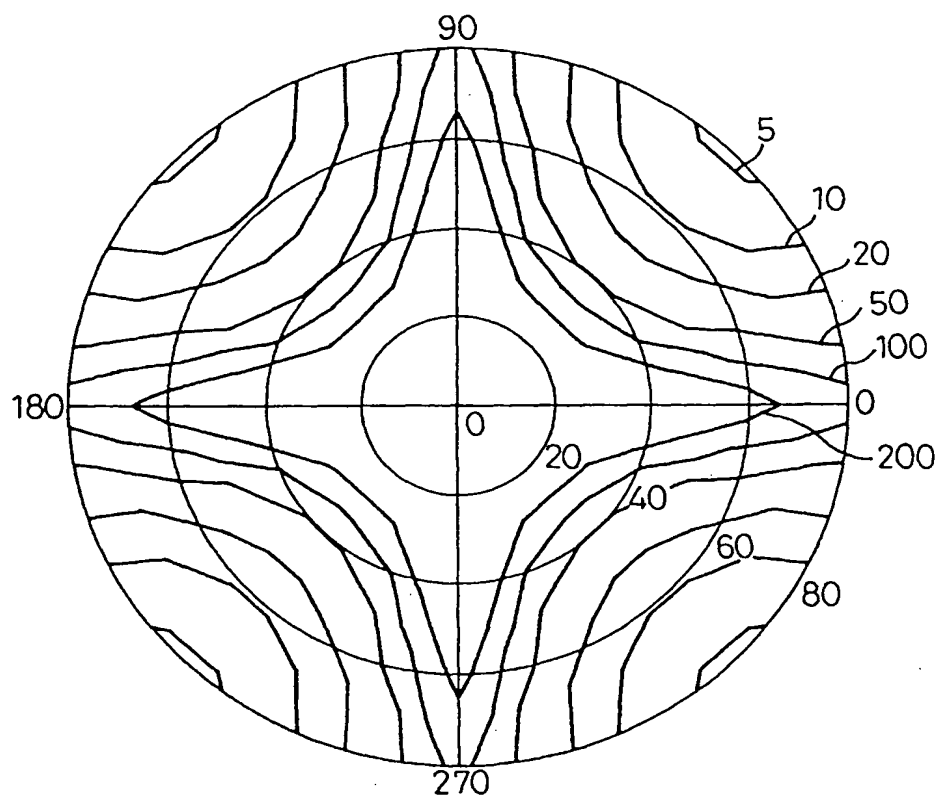
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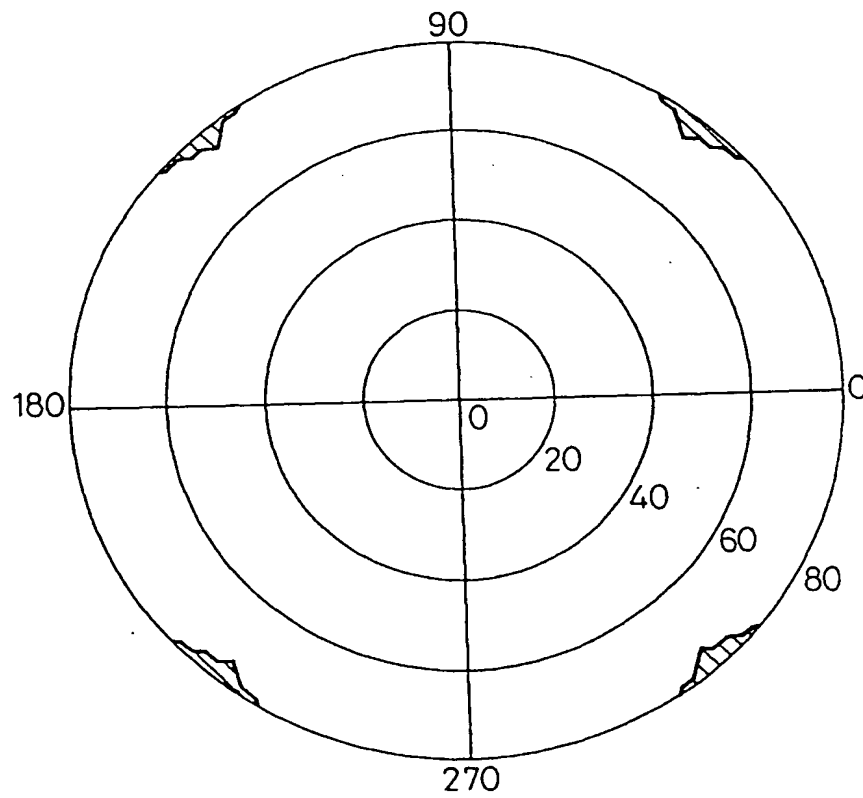
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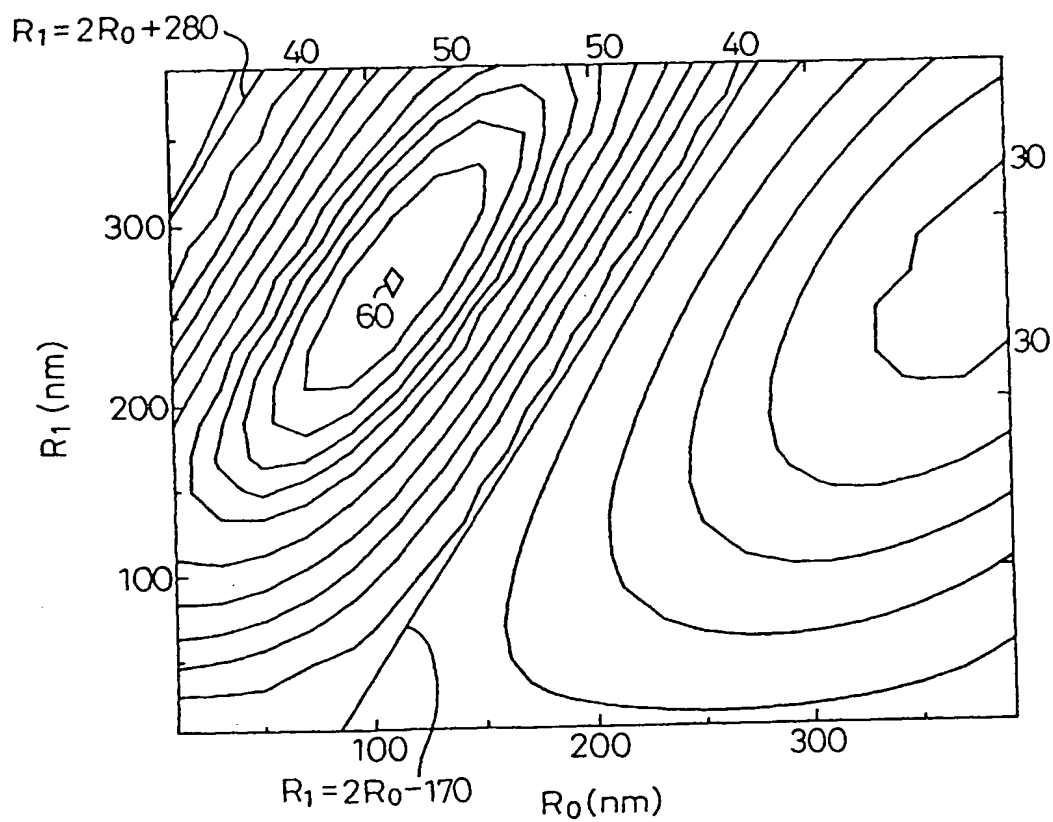
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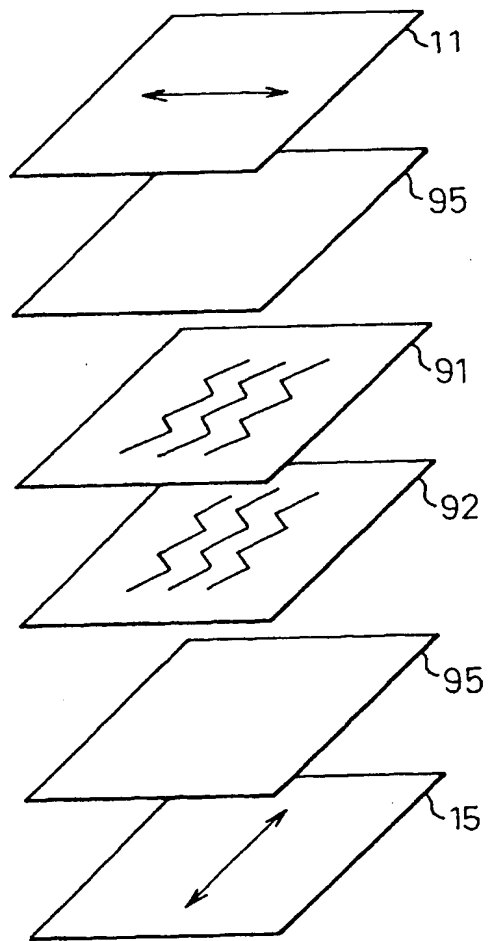
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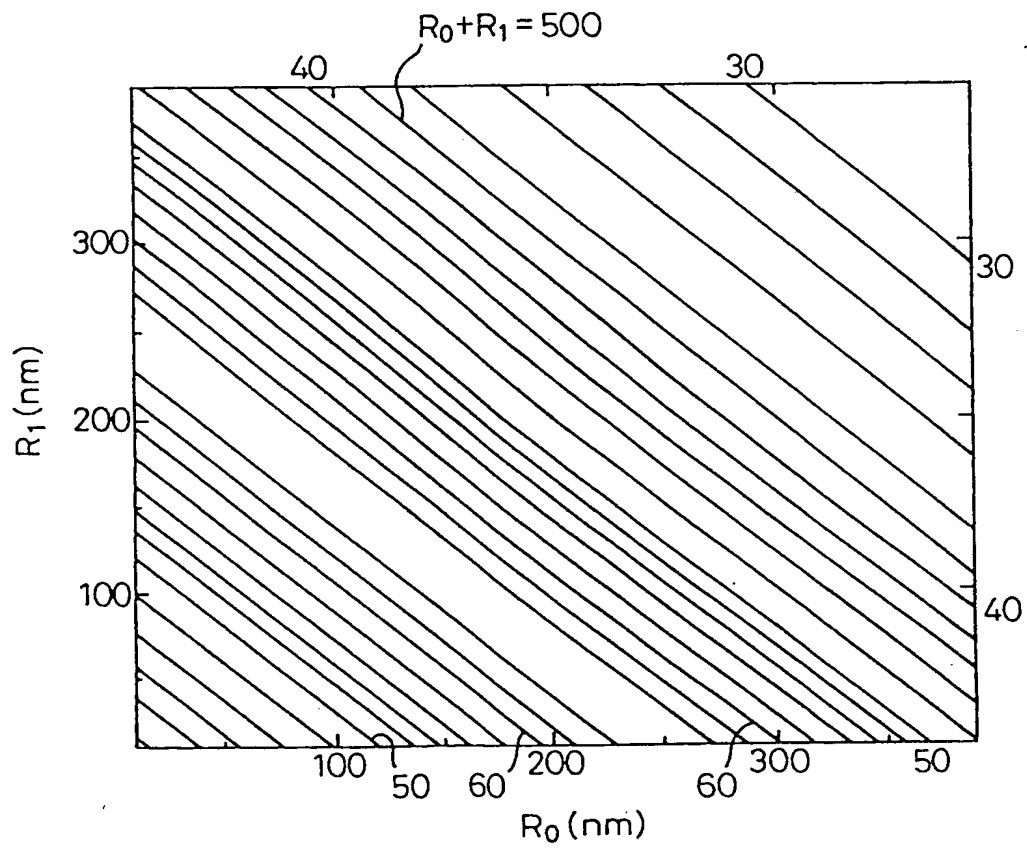
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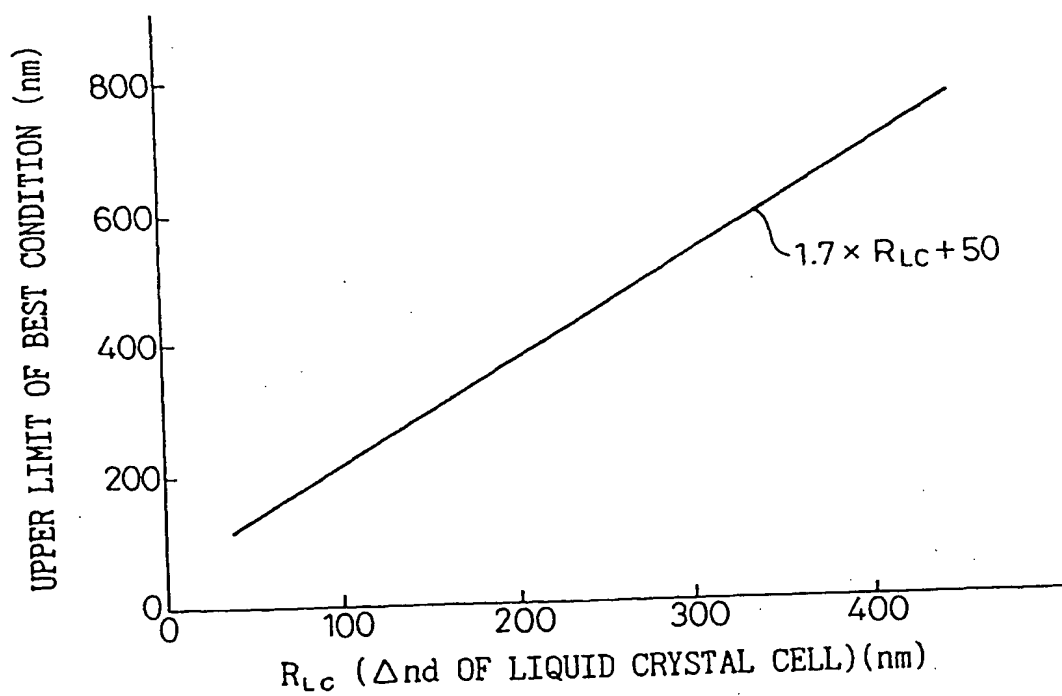
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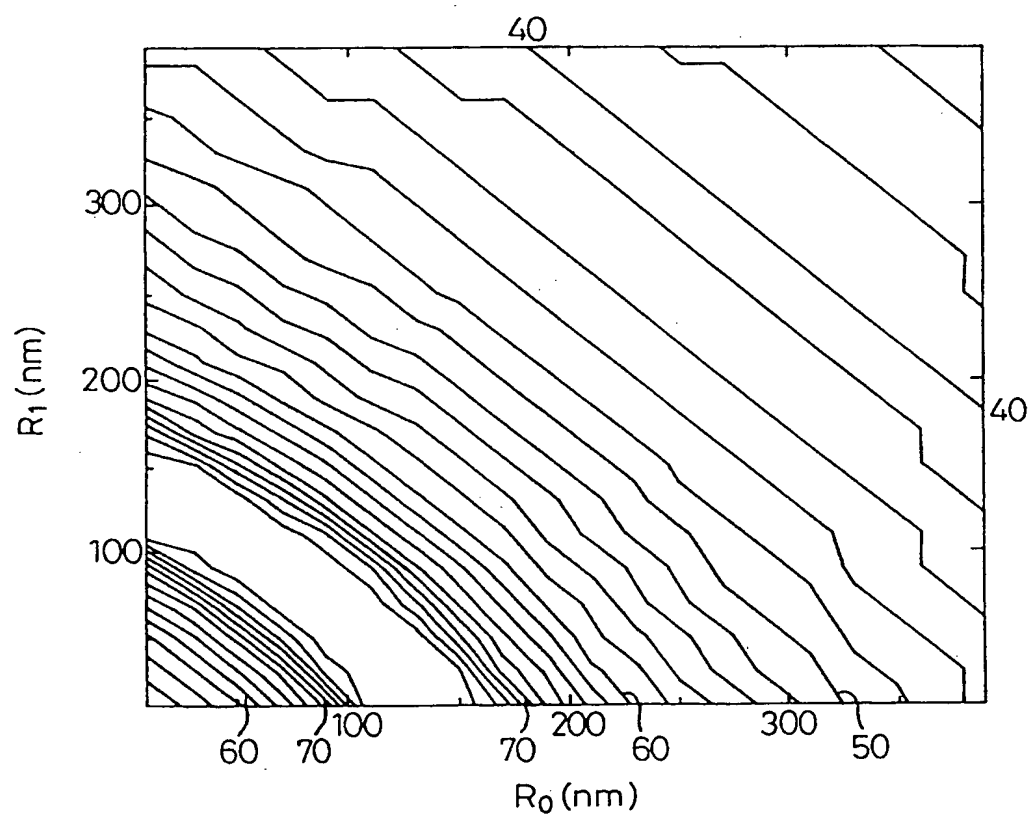
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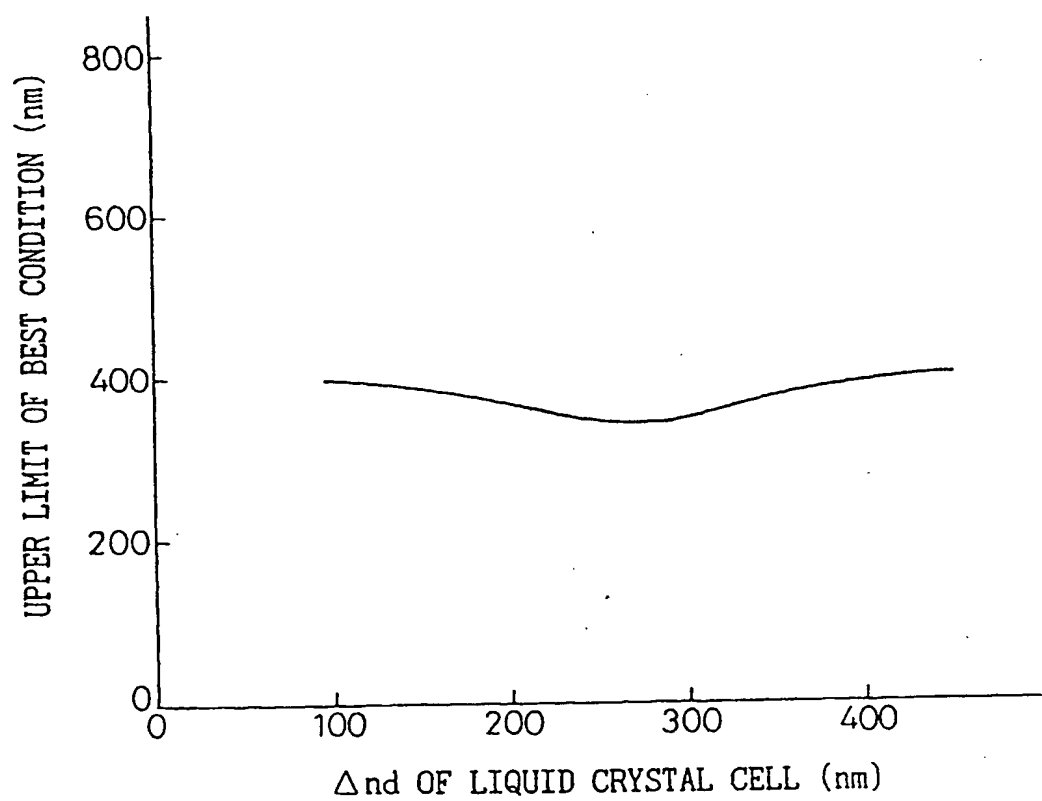
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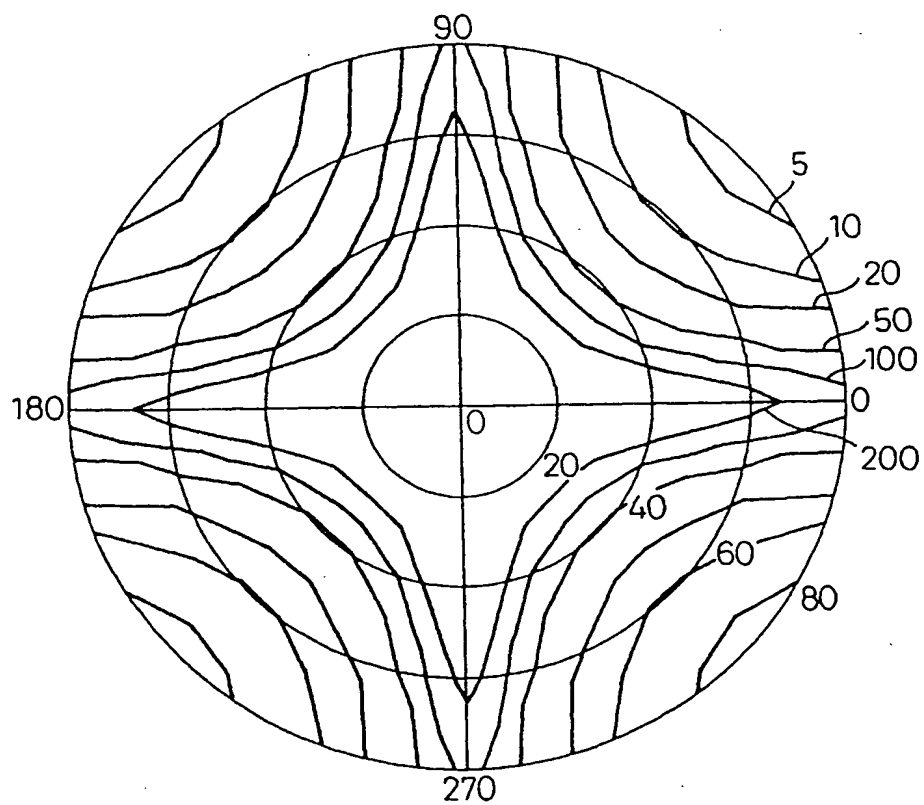
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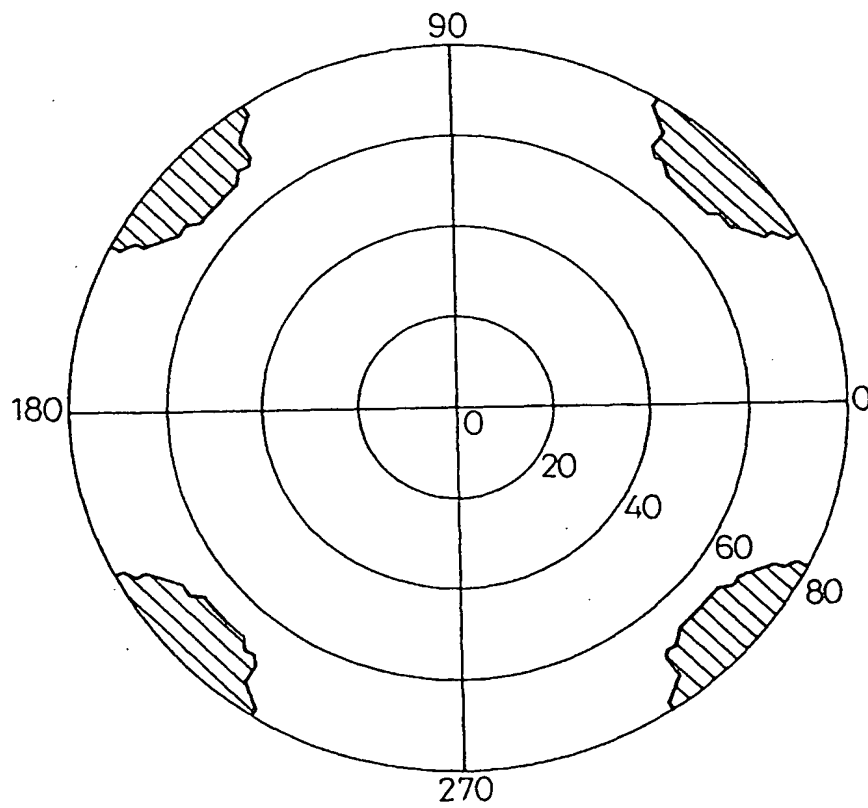
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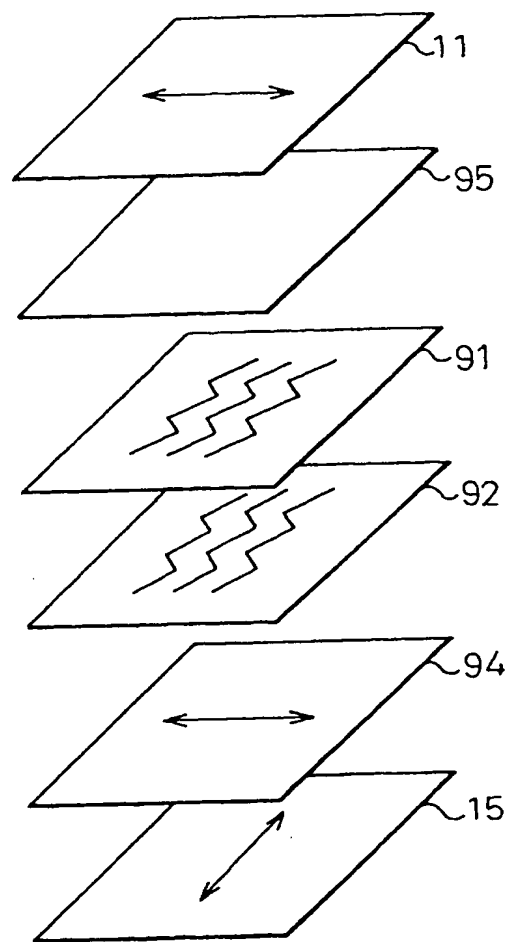
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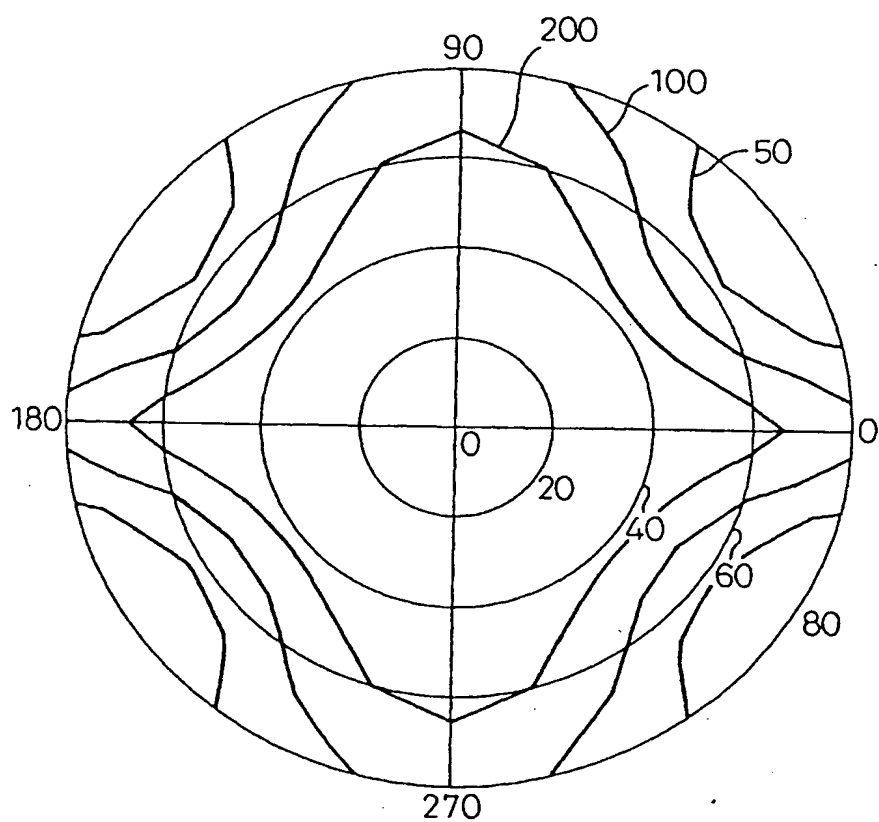
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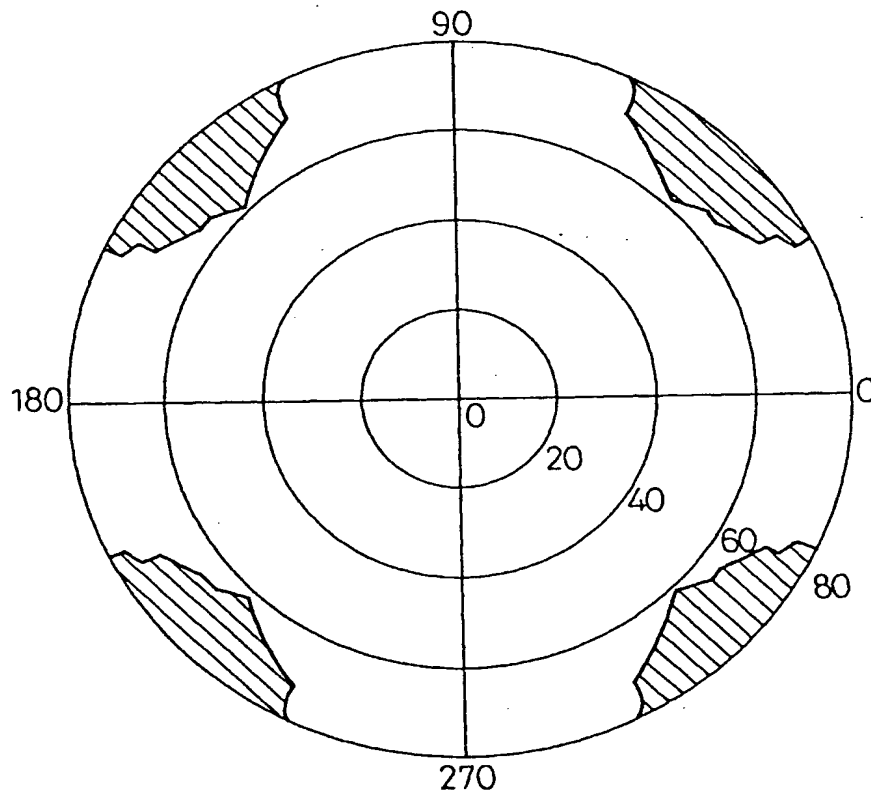
Fig.235

Fig.236

Fig.237
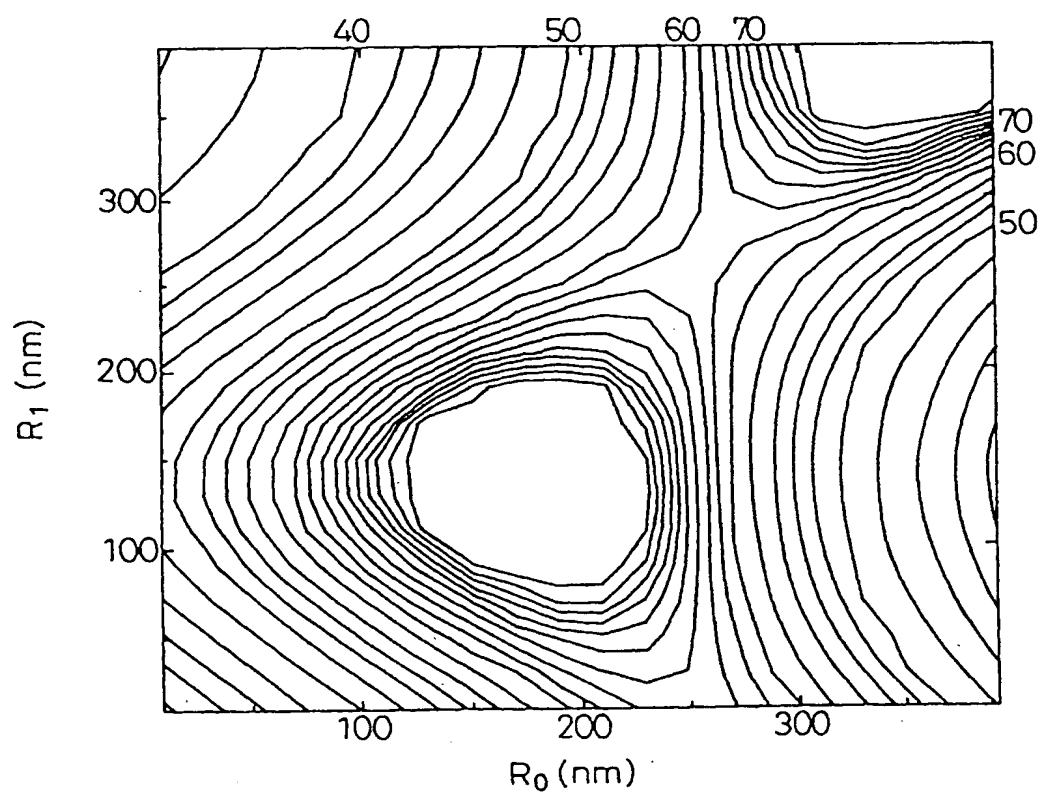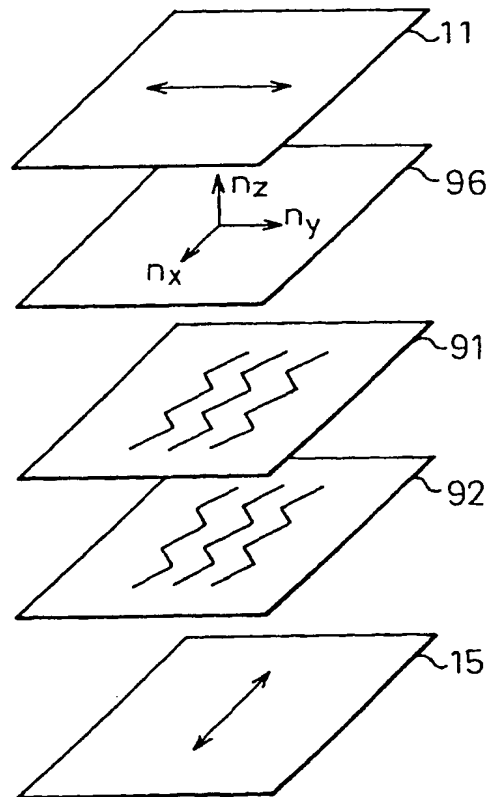

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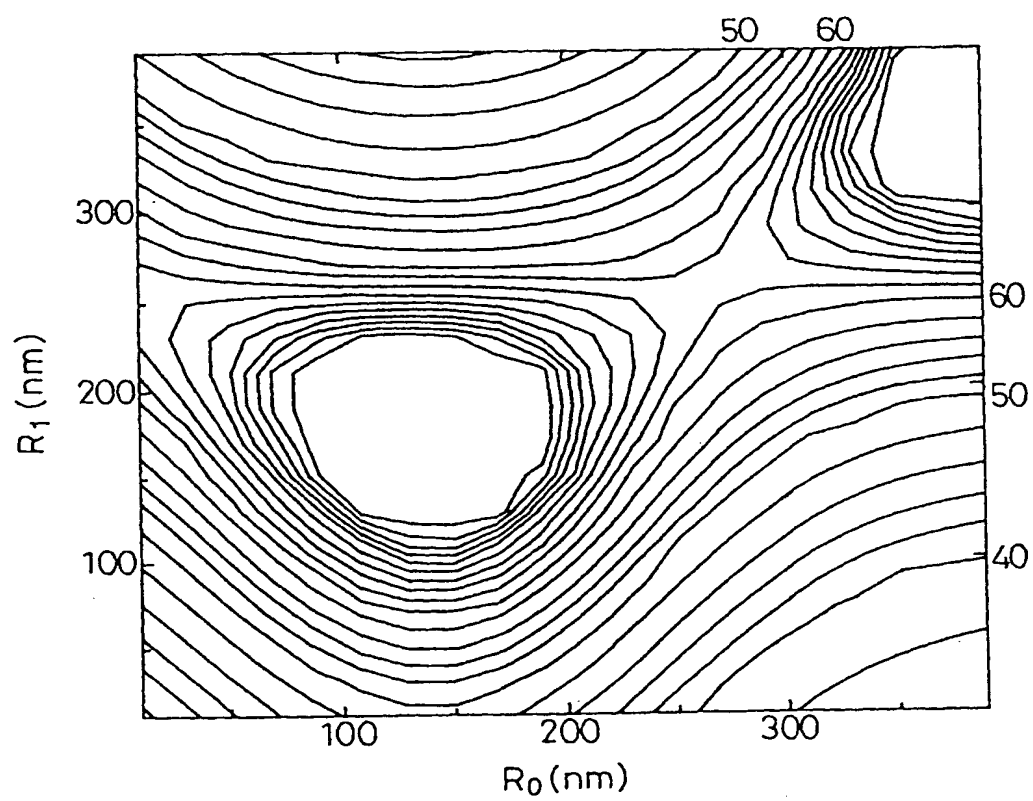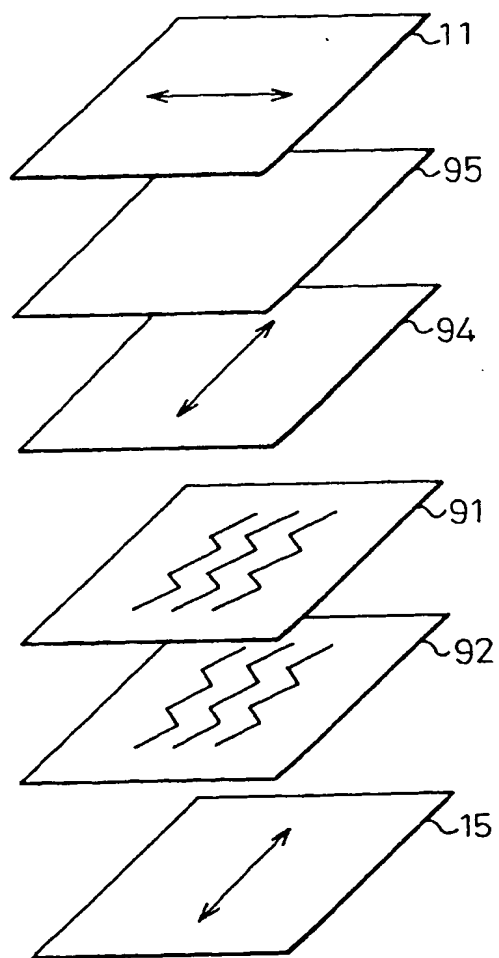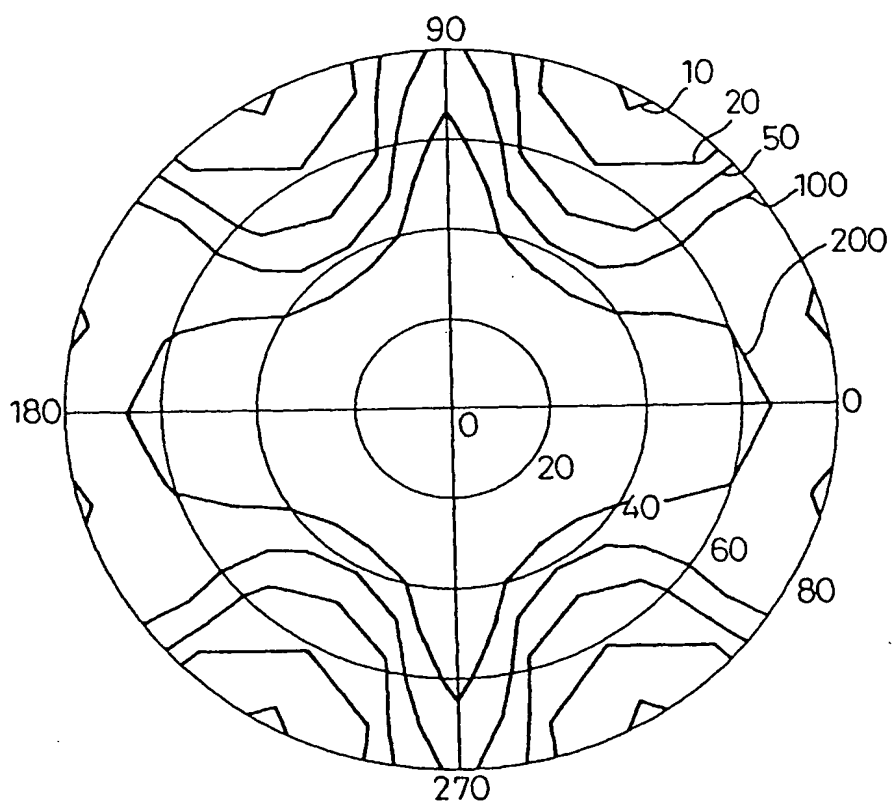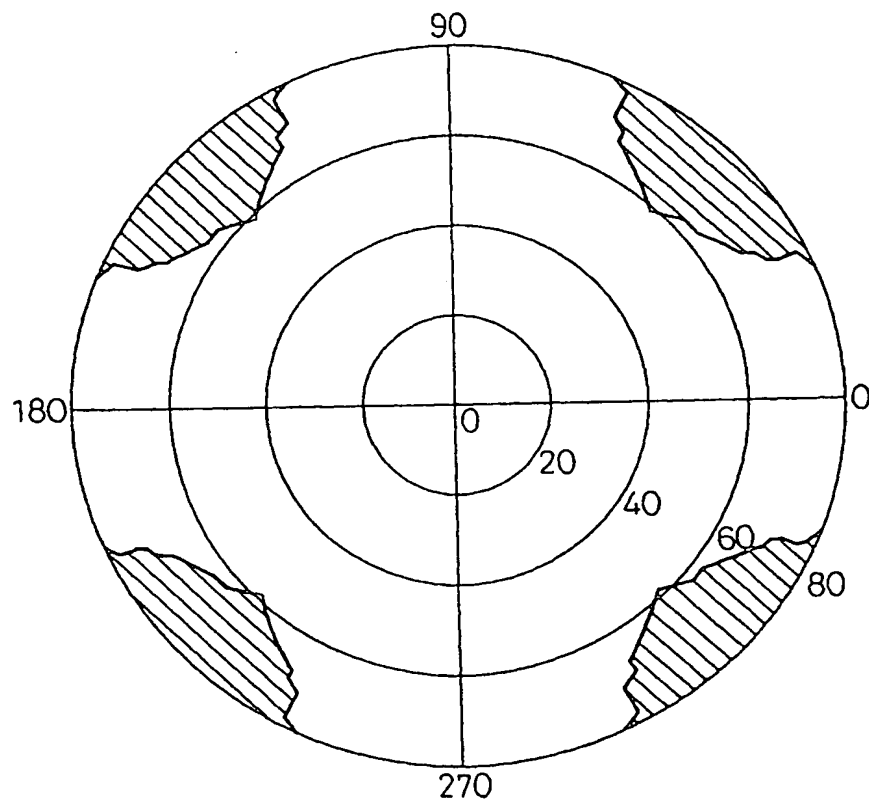
Fig.238

Fig.239
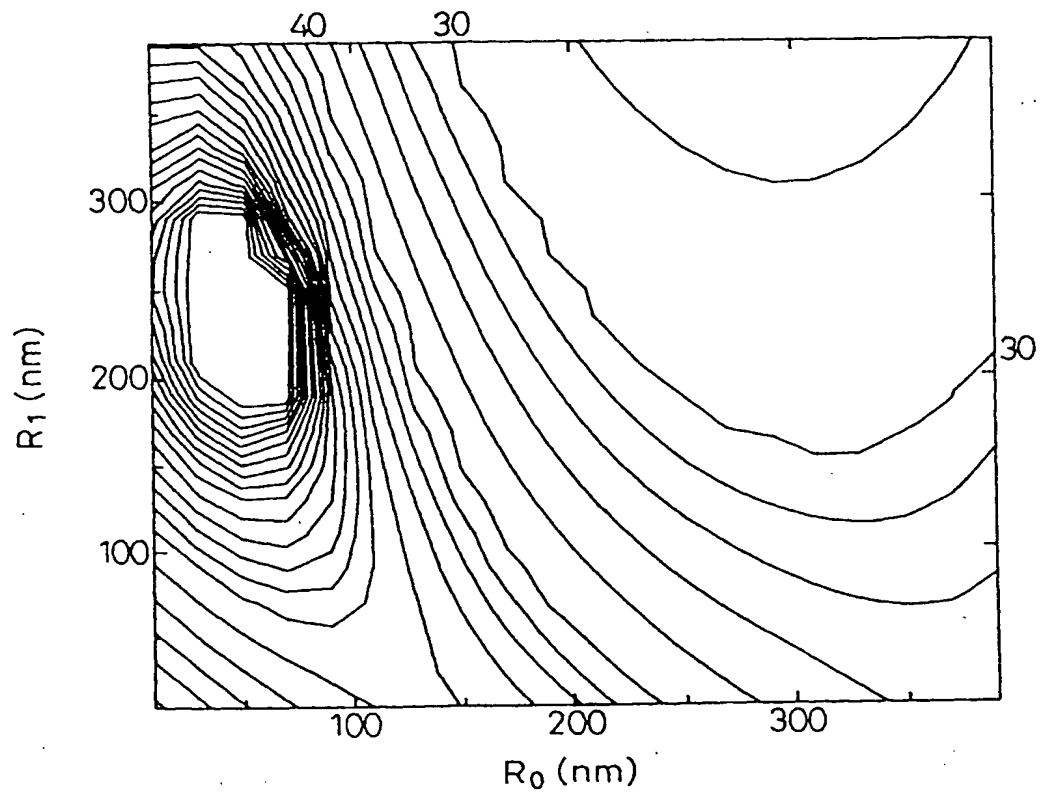
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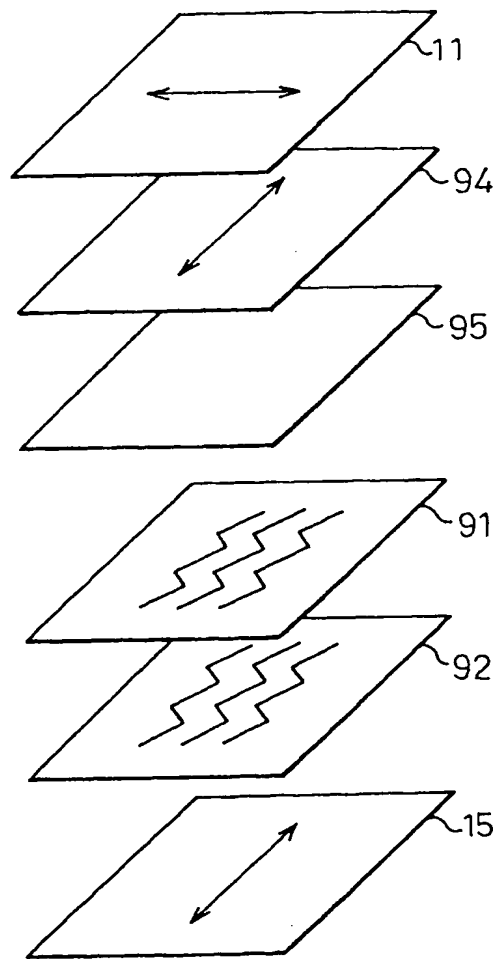
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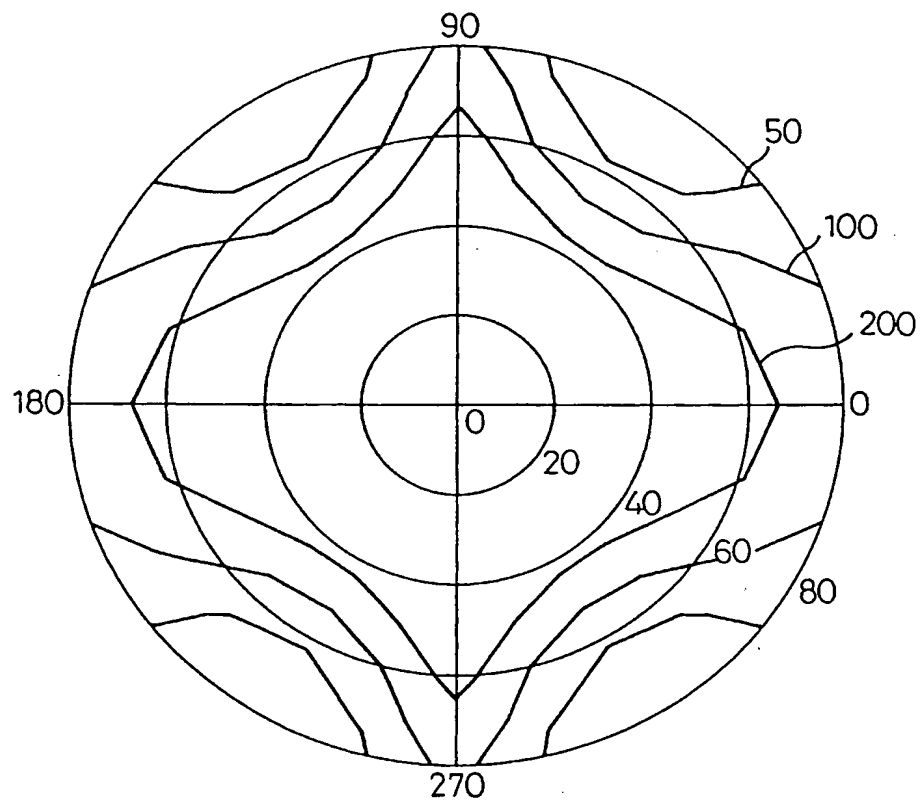
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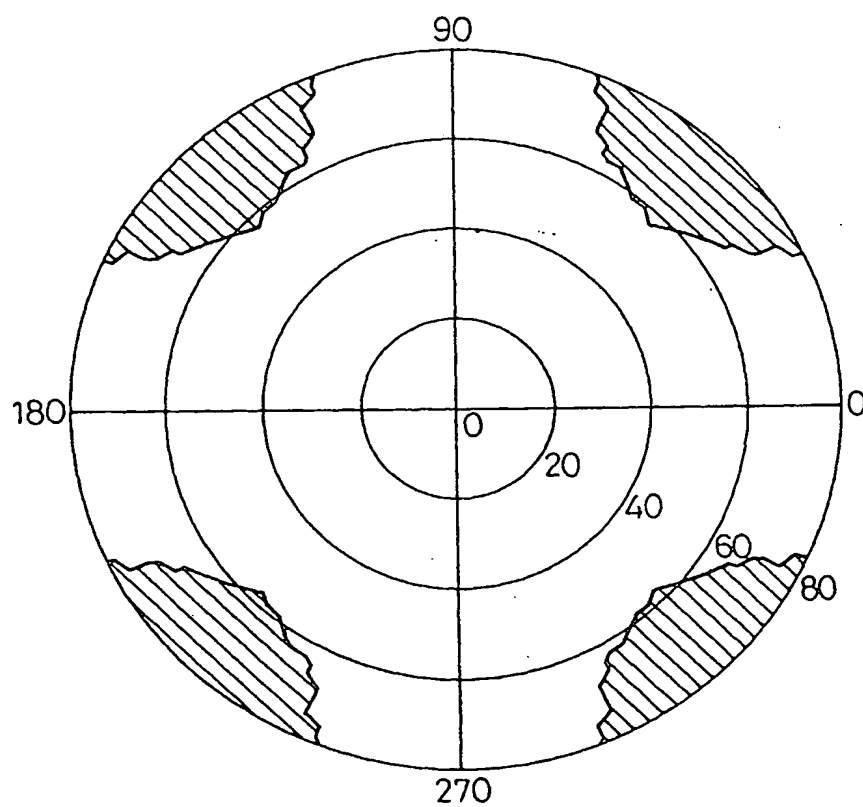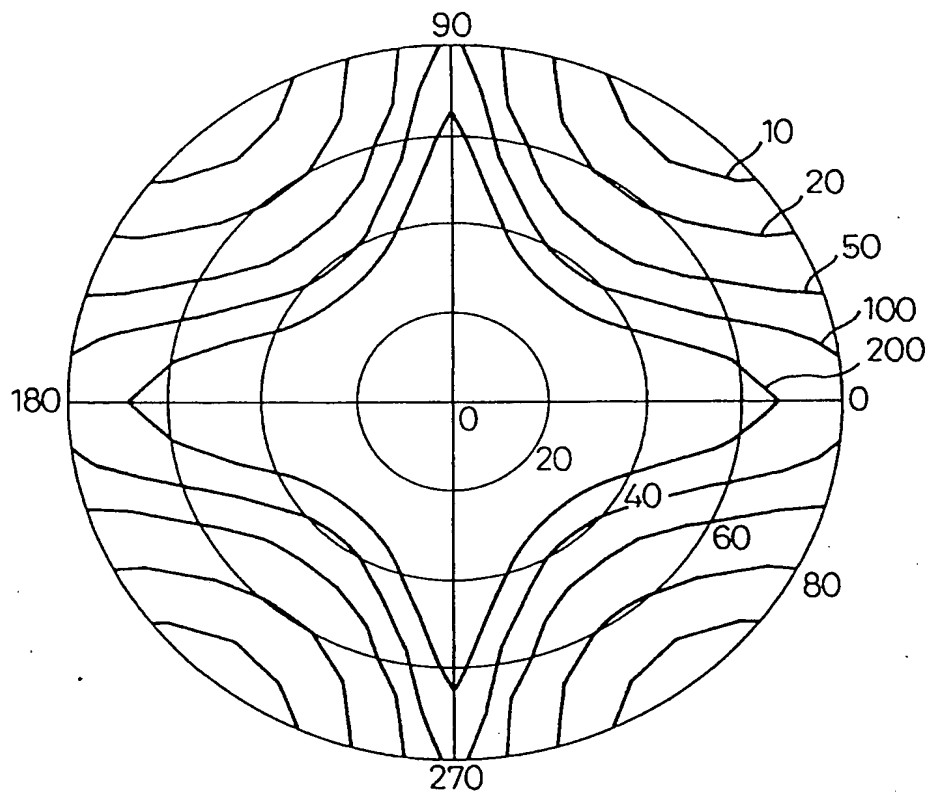
Fig .243

Fig.244

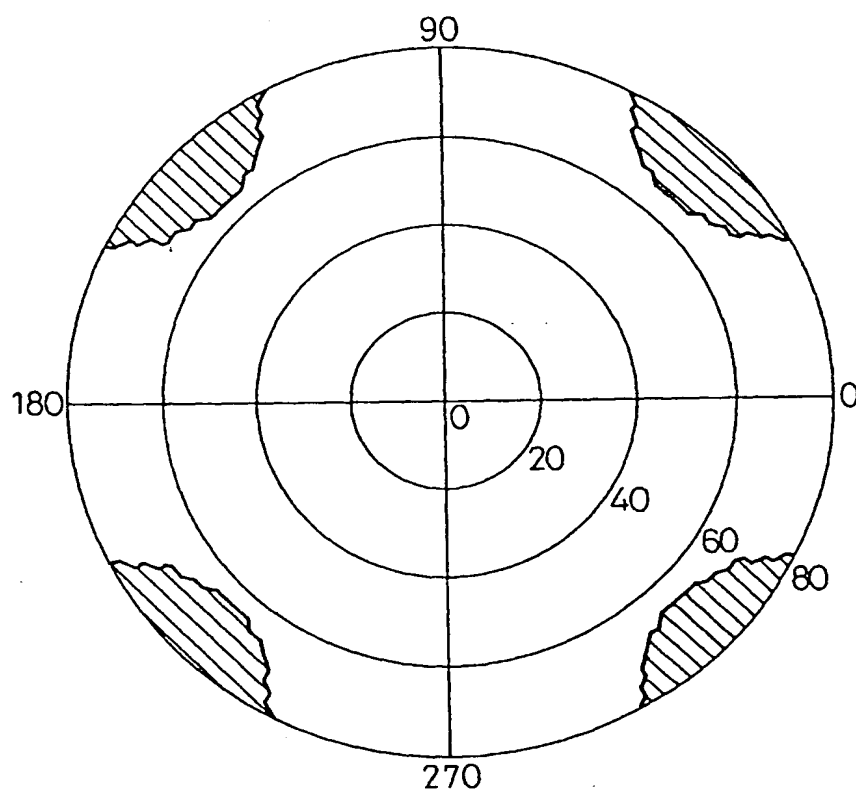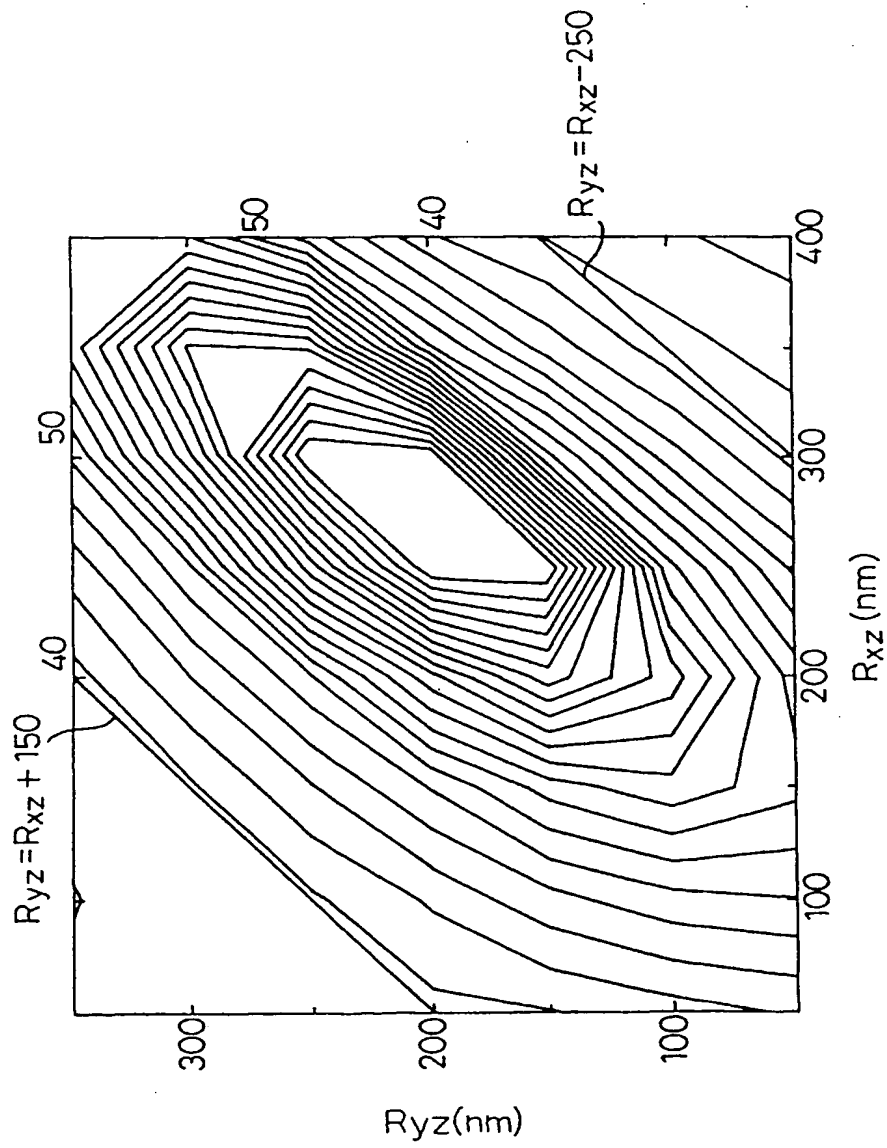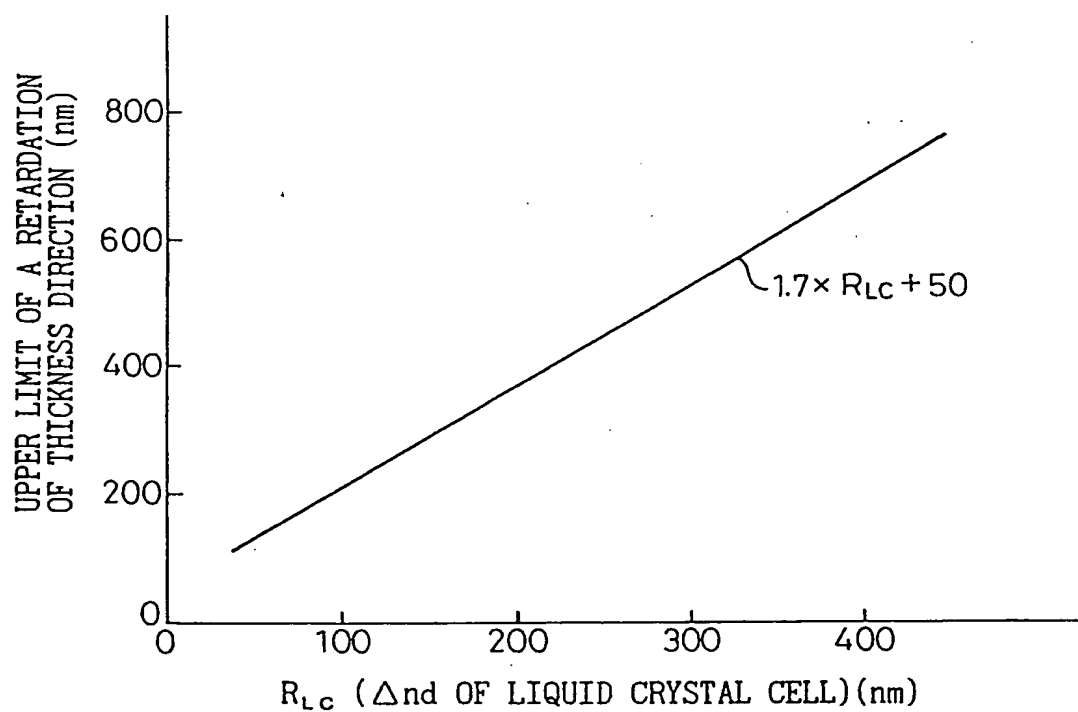# Fig.245

Fig.246

Fig.247

Fig.248

Fig.249

SAMPLE	THICKNESS OF A PANEL (μm) R G B	GAP BETWEEN PROJECTIONS (μm) R G B	PHASE DIFFERENCE FILM Rd VALUE (nm)	TRANS-MITTANCE % (5v)	VIEW ANGLE : CR>10 LEFT-RIGHT DIRECTION	COLOR DIFFERENCE (5v: LEFT-RIGHT) Δu(x)	Δv(Y)
EMBODIMENT A	5.7, 4.6, 3.6	20, 25, 30	320	5.60	±80°	0.03	0.03
EMBODIMENT B	5.7, 4.6, 3.6	20, 25, 30	320	5.60	±80°	0.03	0.05
PRIOR ART 1	R,G,B=3.6	R,G,B=30	240	4.50	±80°	0.06	0.05
PRIOR ART 2	R,G,B=4.6	R,G,B=30	320	5.80	±80°	0.14	0.12

Fig.250

EXAMPLES	INITIAL VALUES	AFTER 200 HOURS
EMBODIMENT C	25	42
EMBODIMENT D	33	51
EMBODIMENT E	26	45
EMBODIMENT F	30	48
REFERENCE	32	70

Fig.251A
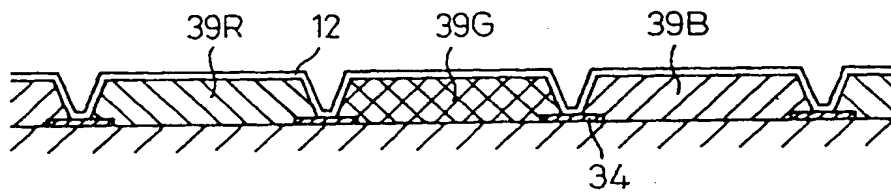
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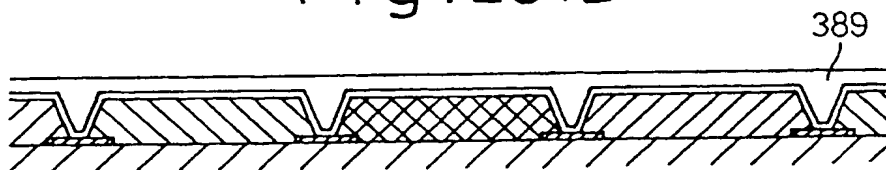
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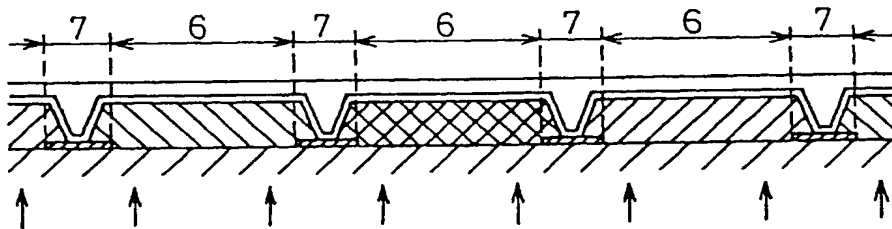
Fig.251D
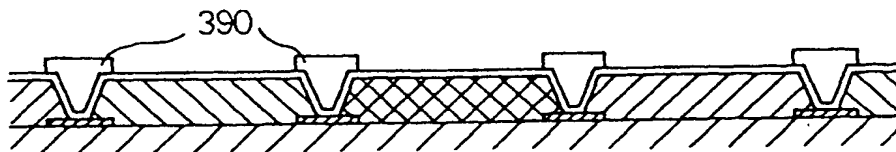
Fig.252A

Fig.252B

Fig.253

Fig.254A

9
20B
20A

Fig.254B

20A
16
39
12

20B   13   20B
17

Fig.255